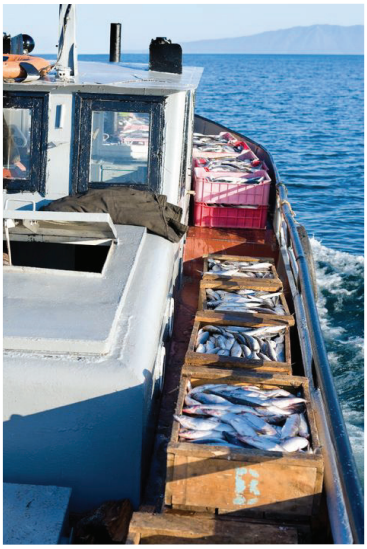
FINANCING FISHERIES CHANGE:

LEARNING FROM CASE STUDIES



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I. OVERVIEW OF FINANCING NEEDS AND TOOLS

WHY FINANCING IS A NEW FOCAL POINT IN FISHERIES CONSERVATION

Over the past two decades, there has been growing awareness of the fact that many global stocks of fisheries are declining rapidly. In response to this trend, a few philanthropic foundations and individuals and a range of NGOs, both small and large, have been working on innovative approaches to improving fisheries management and conservation. Some groups focus on raising public awareness and salience of the issues, others target regulatory change and others target improvements in the fisheries and their supply chains. A few work on all three of these strategies.

Organizations and foundations who have been active in the field of marine conservation over the past two decades have learned that no matter how regulations change or how much awareness there is of the issue, that many changes on the ground cannot be made unless fishers are able to actually change their business models or fishing gear and methods. Even if fishers are required by law to make changes, they sometimes cannot afford to do so, and regulators, in turn, cannot afford the economic impacts of fishery closures.

Fisheries subsidies have been used in the past to alleviate some of these issues, but over time can lead to new problems. In addition, fishermen have traditionally found commercial investors reluctant to invest in their businesses, due to the fact that many fishing businesses lack working and growth capital, credit histories, stable cash flows and the financial and technical expertise to forge relationships with those who can help to improve these business parameters.

The recognition of the barrier to change created by a lack of capital has focused some of the work on fisheries reform on the finance-related challenges. The new focus on financing recognizes three important factors:

1. First and foremost is the issue of scale. There are thousands of fisheries in need of reform globally and many of these fisheries are both large in size and in need

of highly capital intensive gear or business change. Philanthropic grant funds aimed at marine conservation are insufficient to meet the need, and other investors from the commercial sectors will need to be brought in, if change is going to be financed at the needed scale.

2. Secondly, fishermen often lack access to credit and philanthropic grants tend to provide only a temporary fix to cash flow needs. Grants do not have bearing on a fisherman's credit history and do not improve the fishers long term access to debt or working capital.

3. Most important is the fact that, as many of the case studies demonstrate, fisheries change often carries its own financial rewards. Many reforms and changes which support conservation also result in higher profits and revenue streams for the involved businesses. This makes fisheries a potentially attractive investment arena for many commercial investors, once reform projects are properly structured and agreed upon between conservationists and the involved businesses. As commercial investors and social investors become more involved in the field of fisheries, the scale of the impacts that can be achieved is expected to expand.

Foundations in the field are now looking to support this transition from fisheries conservation as a purely philanthropic investment to a blended conservation and business investment by encouraging non-profits, social change leaders and business entrepreneurs to create innovatively structured projects that can both build value for private investors and improve the speed and scale of fisheries conservation impacts.

How Case Studies were Selected

This report aims to support this transition, by providing information about and highlighting the work of those at the forefront of innovative fisheries finance.

The case studies in this report were selected using multiple criteria. The first was the willingness of the project leaders and organizations behind each initiative to openly share lessons learned, mistakes and keys to success. Very few, if any, innovative ventures which are launched are successful in every aspect of their structure and performance. Though it is almost impossible to foresee each issue that could arise and to mitigate all of the risks, especially when attempting to do something new, learning from those who have tried similar efforts before should at least help new project

leaders to make unique mistakes. Over time, we hope that this open sharing will help to move the field forward, so that successes can be scaled and investments deployed even more efficiently.

A second important criteria used to select the cases was the relevance of conservation in its investment structure. Each of the cases presented have differing types and scales of conservation impacts. In some cases, the expected impact is more focused on social change than conservation. However, both the fisheries and social change cases were selected in terms of their potential application to the conservation and sustainable management issues that are prevalent today in fisheries. The expectation is that the lessons from each will help new innovators and entrepreneurs to adapt and design their own investment and governance structures to achieve significant change on the water.

Though each case presented numerous lessons for the story to focus on, we have attempted to remain focused on the investment structures put in place, the types and mix of investment dollars in each, the expected conservation (or social) benefits and the reasons for the decisions behind each. We have also asked each project leader to share with us their insights as to what could have been done differently , or on what have been the critical success factors behind their work.

When developing new projects, we hope that innovators will be inspired by these examples and feel free to get in touch with the project leaders behind each of these stories to add depth to the learning which is beyond the scope of this document.

Layering and Blending Sources of Capital to Create Value

The case studies demonstrate that business and non-profit endeavors have much to gain by using all of the three main types of capital available - grants, debt and equity - as well drawing this capital from multiple sources.

Each new source of capital will potentially add both complexity and flexibility to a project by introducing new elements of mission focus or exit timing. At the outset of an innovative project, layering different sources of capital with different mission elements and exit times mixed in, can help bring needed flexibility and room for

adaptation to a project. Table 1 below serves as a reminder of the types and various sources of capital that are available.

The case studies also demonstrate that there are number of ways that these three different types of capital can be tied together under governance structures for the project. Again, what is possible will be determined by the legal context in which each project operates, as well as by the mission and vision of leadership. The structures presented in the case studies have been chosen to highlight innovations that have been tested thus far. We hope that these examples will inspire others to create new and different structures that capture the successes and mitigate the risks experienced by entrepreneurs thus far.

Table 1: Sources and Forms of Capital Commonly Used by Different Investor Types

	FOUNDATIONS	GOVERNMENT	BLENDED INVESTORS	COMMERCIAL
GRANTS	Grants for: • Seeding new concepts • Programs • Technical Assistance • Asset purchase • Operations	• State/Fed Grants • Gear Rebates • Vessel Buybacks • New Market Tax Credits	• Sometimes provided alongside a debt or equity investment	• Generally not applicable
DEBT	• PRIs (Program Related Investments)	• SBA (Small Business Administration) loans	• CDFI (Community Development Financial Institution) • Microfinance	Bank Loans: • Recourse or non-recourse • Bridge, short term, or long term
EQUITY	• MRIs (Mission Related Investments) • Endowments • PRIs (under certain structures)	• World Bank social equity portfolios	• Social Investors • Social Venture Capital funds	• Angel Investors • Venture Capital / Private Equity • Tax-Equity investors

A definition of the above terms and other relevant financing terminology is provided at the end of this report.

The Role of Conservation in a Project's Structure

As new projects are developed, it is essential that leadership define the specific role of conservation. The focus on conservation does not have to be exclusive of social and economic gains, but should have its own unique metrics. If mission-based investors such as foundations or social investors participate in the project, then it will be important that the conservation impacts be re-evaluated each time strategic changes are made, or whenever new investors are brought into the mix. Alignment around the conservation objectives, as well as around any social or economic objectives, will help all investors, whether exiting with a profit or a measurable conservation impact, to work more closely on making the project a success.

Recognizing that conservation and livelihoods are closely linked and that the role of financing in a conservation project can both define the strategic focus and the types of partnerships which can be built, we have divided the case studies accordingly. There are three groups of cases, and in each, financing is used differently to support specific conservation outcomes, in addition to yielding social and financial returns for communities and investors.

1. Assuring conservation through ownership: Using equity for asset purchase with an exit strategy
2. Promoting conservation through targeted lending: Filling credit gaps with debt instruments.
3. Enabling conservation by combining services and capital: Incubating and providing information, connections and financing to promote business development.

At the end of each group of cases, readers will find one or more cases drawn from other fields of philanthropic and social investment, including land conservation, energy efficiency, arts and culture development, and livelihood creation. These cases have been carefully chosen due to the applicability of their methodologies and structures to the fisheries conservation arena, and are meant to highlight possible innovations that could be developed to scale fisheries conservation efforts over time.

Readers should note that each case has been placed in the section in which it is most relevant, even if it might have qualified for inclusion in multiple areas.

DESCRIPTIONS OF CASE STUDIES COVERED:

ASSURING CONSERVATION THROUGH OWNERSHIP:

Using Equity for Asset Purchase with an Exit Strategy

THE NATURE CONSERVANCY'S MORRO BAY BUYOUT

To prevent the collapse of a fishery and to secure long term habitat protection from bottom trawling, TNC used grant funding to purchase trawlers and permits, brokering a cooperative deal with fishermen, government and environmentalists.

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THE SEA CHANGE INVESTMENT FUND

To encourage private investment into the sustainable seafood business sector, the David and Lucile Packard Foundation and California Environmental Associates have created an environmentally conscious venture capital fund, funded equally with PRI debt and private equity investments.

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BEARTOOTH CAPITAL PARTNERS.

Beartooth Capital's private investment fund provides a relevant model for fisheries conservation work. By placing conservation at the core of its land acquisition strategy, and working with environmental partners to enhance and protect the land it buys, Beartooth creates both returns for its private investors and positive environmental impacts.

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PROMOTING CONSERVATION THROUGH TARGETED LENDING:
Filling Credit Gaps Using Debt Instruments

THE CAPE COD FISHERIES TRUST

To protect waterfront communities during a management transition to a fishery quota share system, the CCFT raised a diverse portfolio of capital for the purchase and re-leasing of quota shares to local fishermen.

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VERDE VENTURES AND INTEGRADORA

Conservation International's Verde Ventures fund provided a working capital loan to help an emerging Mexican business, made up of cooperatives of sustainable lobster fishermen. The loan helps gain direct access to customers, improving profits for the fishermen and building market incentives for sustainable practices.

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THE NORTH PACIFIC FISHERIES TRUST

To help Alaskan small scale community fishermen access quota share, the David and Lucile Packard Foundation provided a PRI to Ecotrust, that was intended to bridge the financing gap for community entities to purchase and re-lease quota to local fishers.

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JOHN D. AND CATHERINE T. MACARTHUR FOUNDATION

The MacArthur Foundation has created a PRI-based loan fund together with appropriate financial and technical assistance partnerships to help its Arts grantees build credit and sound financial practices. The structure and purpose of this fund provides a relevant model for foundations working on fisheries issues.

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ENABLING CONSERVATION BY COMBINING SERVICES AND CAPITAL:

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A community development incubator in Maine helped launch a sustainability-focused community supported fishery (CSF) business, by providing a mix of business support, technical guidance and access to funding for the CSF to grow and succeed as an independent entity.

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THE FARMERS SCREEN (FARMERS CONSERVATION ALLIANCE)

The Lemelson Foundation and RSF Social Finance provided a mix of grant, loan guarantee and PRI support to help a NGO to bridge a critical working capital gap. The organization (FCA) needed the capital to be able to grow its work, which encourages farmers to change equipment and gear to improve profits and reduce negative environmental impacts.

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INDUSTREE CRAFTS LTD AND INDUSTREE CRAFTS FOUNDATION

India's Industree Crafts is a useful model for those working on supply chains in the fisheries sector. Industree uses a hybrid business/non-profit structure whose synergies enable it to scale both its business and the social impact of rural employment it generates.

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E+CO

This venture fund provides a working model for fisheries of how a single entity can create large scale incubation of environmentally-oriented businesses. By tightly integrating the delivery of services and capital, E+ Co has been able to help a large number of entrepreneurs to successfully build clean energy businesses in developing countries.

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II. CASE STUDIES: FISHERIES FINANCING IN PRACTICE

ASSURING CONSERVATION THROUGH OWNERSHIP:

USING EQUITY FOR ASSET PURCHASE WITH AN EXIT STRATEGY

These case studies include conservation as a core element, i.e. the project was specifically designed and undertaken with a conservation mission as its focus. In some cases, the conservation focus was chosen as a way to gain competitive advantage in the investment marketplace. By packaging conservation value together with financial value in the right way, these project leaders have been able to provide value on both fronts. The cases discussed tend to be large scale interventions involving investment into assets valued into the multiple millions of dollars.

CASES:

THE NATURE CONSERVANCY'S MORRO BAY BUYOUT

Asset Purchase For Eventual Return To The Community

In the year 2000, as a result of overfishing and destructive trawling practices, the California groundfish fishery collapsed, and was declared a federal disaster area. Three years later, The Nature Conservancy (TNC), working with several nonprofit partners, stepped in to attempt to protect key seafloor habitats and develop a more sustainable fishing industry over time.

By building relationships with, gathering information from, and understanding tradeoffs between local fishermen in Morro Bay and key State and Federal regulatory officials, TNC was able to broker a deal that secured a permanent ban on bottom trawling along 3.8 million acres of the California coast, in exchange for TNC's purchase of quota shares and trawling vessels from fishermen who wanted out of the struggling fishery.

TNC is now looking for a way to use its ownership position in this fishery to create incentives to improve the economic and environmental performance of this trawl fishery. They would like to maintain conservation gains they have made in the region and continue to improve marine environments. They would also like to manage the sale or transfer of their acquired permits back to local fishermen in a way that helps establish a new community and environmentally

oriented fisheries policy. To these ends, TNC has been experimenting with the use of their permits to test and demonstrate if and how fishing under the new gear and area restrictions can be both profitable and good for the marine environment.

Crisis Leads to a Deal

OBJECTIVE: TNC wanted to prevent the collapse of the fishing community due to over-fishing and to secure long-term protection from bottom trawling.

Historically, groundfish landings supported robust fishing industries and communities along California's Central Coast, which includes the fishing ports of Half Moon Bay, Moss Landing, Monterey and Morro Bay. For decades, fishermen had hauled large volumes of catch ashore; however due to overfishing as well as the use of destructive trawling methods, there was a severe decline in fish yields. The value of the fish landed in the west coast dropped from $110 million in 1987 to $35 million by 2003.

In January, 2000, the Secretary of Commerce declared the West Coast groundfish fishery a federal disaster. By 2003, Rockfish Conservation Areas were established to keep fishing boats away from areas known to have overfished species, and the federal government created a buyback program that permanently retired roughly 40% of the total fleet's production of the West Coast.

The crisis in the fishery led to a groundbreaking collaboration in Morro Bay between environmentalists, led by TNC's Chuck Cook, and by local fishermen, who had witnessed a drastic decline in the fishery themselves and shared the environmentalists' concern about the fish populations. In 2006, TNC offered their own buyback program: they bought permits from any trawl fishermen who desired to exit the struggling fishery, and in return, the fishermen

worked with TNC to jointly develop a plan to protect 3.8 million acres of ocean in the Central Coast. The federal government – presented with a plan approved by both environmentalists and community stakeholders – quickly approved the plan and these 3.8 million acres are now a no trawl zone and marine protected area.

INNOVATION USED TO MEET THE OBJECTIVE: TNC became directly involved in the fishery through ownership of equipment and fishing rights, allowing it to broker solutions for commercial fishermen and environmentalists alike.

The purpose of TNC's permit acquisition was to relieve some of the economic impact on the fishermen of establishing no trawl zones, as well as to reduce the total trawl effort in the area. Many fishers wanted to exit the fishery and support the area closure, but economically could not, without paying off existing debt and business expenses. TNC wanted to remove this barrier to cooperation and also wanted to use the acquired fishing rights to explore the potential for using different gear and spatial restrictions on fishery management and economic performance.

What turned out to be critical to the success of this collaboration was the fact that, both before and after the permit acquisition, TNC placed and maintained a dedicated project director, Michael Bell, on the ground in the small Morro Bay community, fostering casual interactions with the fishermen on a regular basis. Having a person working and living together with fishers created familiarity, trust and offered multiple avenues for communication and information exchange. This broke down cultural barriers, bringing the environmental organization and the fishermen together and initiating a collaboration which continues to today.

FINANCIAL TOOLS EMPLOYED: The purchase of trawlers and quota share was completed using grant funding.

Financing the Asset Purchase

TNC's ability to purchase vessels and permits and take a major ownership stake in the fishery at just the right time

came in part from private grant funding from visionary private philanthropists. A buyout of this magnitude is a high-risk venture, and although TNC likely knew it would ultimately return these assets to community ownership, the organization could not know at the time whether it would be able to eventually recoup all, or any, of its investment. This limited the financing options considerably as PRI or loan financing was too risky for TNC and for lenders given the lack of projected revenue streams at the time. However, financing through grants directed at natural resource conservation were a good financing solution. Since the Conservancy's legal options to purchase trawl permits and vessels were conditioned upon the Secretary of Commerce establishing the No Trawl Zones in key seafloor habitat areas, grant donors could be certain of achieving specific conservation impacts if their funds were deployed.

Government capital was also not a viable option, because entering this market as a major player requires confidentiality around what assets were being bought and at what price; government funds require greater transparency than was possible for this project. In addition, the Conservancy was keen to make these transactions between two private parties and wary of having government interference or control over permit ownership and use.

In addition, the exit timeframe and the payout amount at that time were highly uncertain, making it difficult to bring on any equity investors seeking to recuperate their investment in the future. This was especially the case because aside from uncertain timing, TNC also wished to prioritize community and environmental gains over financial return. The assets were to be returned to the community, rather

KEY LESSON FROM THIS CASE:
Debt and equity were not ideally suited to this type of challenge. Public funding was also problematic due to the confidential nature of the information that needed to be gathered from stakeholders. Grant capital or very patient loan capital were initially the only viable sources of financing for this project.

than outsiders, further limiting the financial returns upon exit.

Ultimately, private philanthropic grant capital was the only option that provided the flexibility, patience and necessary confidentiality for this project. Using grant capital, TNC took ownership and control of the fishing equipment and 13 federal trawl permits.

The Advantages of Ownership

While TNC made significant conservation gains in the original purchasing deal that led to the no-trawl zones, they have never had any desire or intention to be involved in owning fishing assets for the long term. Chuck Cook and Michael Bell are now actively working with the community and regulators to find the best way to make the quota shares available in perpetuity to local fishermen, while also preserving the conservation gains that were made.

TNC's position as a major asset holder in the fishery together with their capacity to engage in policy put the organization in a very different position than that of a typical NGO, which works as a third party watchdog and advisor to asset holders and managers. Though initially uncomfortable, the position they now have as an asset holder is the key to generating many of the significant opportunities arising from this investment. This position both builds upon and helps to shape their role in regional policy.

To help Morro Bay and the central coast region re-emerge as an economically viable and environmentally sustainable fishing community, TNC is currently working with fishermen to demonstrate how the new quota-based system can work. It is leasing over half of its permits back to fisher-

men who agree to information sharing and conservation restrictions, with the goal of gathering data and demonstrating the viability of the new gear and practices restrictions. This leasing process generates a small stream of income, which helps TNC to cover the costs of placing observers on-board the vessels and of preparing data gathering and analysis frameworks.

Also, since the acquisition of the fishing permits, the government began a process to transition the fishery to a quota share system. This new quota share system is in the early stages of transition and will go into effect in 2011. As a major asset and information holder, TNC has a unique place at the table as government tries to formulate new policy around these types of catch share transitions. They are helping to provide information to policy makers on what types of legislative restrictions and options might be considered to ensure that some quota shares remain in the local community and that the fishery remains both economically viable and environmentally sustainable. Without its ownership, TNC would have a far more limited role in policy discussions, as well as much less information upon which to base its advice.

KEY LESSONS FROM THIS CASE:
Purchasing and owning significant fishery assets requires a dedicated presence on the ground, resources to invest in developing community relationships, a strategy for using the assets sustainably, and a plan for divestment. Having and communicating a clear vision of desired outcomes from leveraging assets is critical.

Buyer Beware: Purchasing Assets is a Long Term Commitment

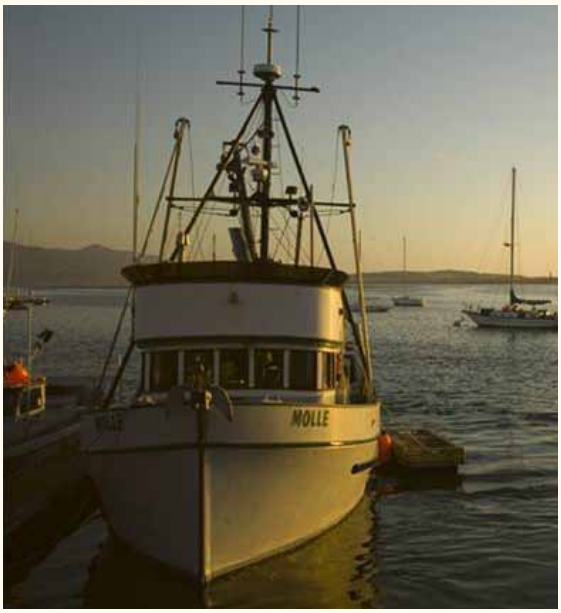
The TNC experience shows that buying into a fishery directly through ownership and control of key assets like quota shares can give an NGO great influence in achieving conservation gains. The west coast trawler buy-outs, acres of essential fish habitat created, and new fishing gear and practices policies that are emerging are a testament to the pivotal role TNC has played. In terms of economic

impacts, landings data for the Morro Bay region demonstrates a steady increase in weight of ground fish products caught using sustainable methods. Local fishers believe that these gains may be attributed, at least in part, to the closure of the area to bottom trawling. Although challenges remain for TNC in how to preserve these gains as it returns the quotas to individual fishermen, it has clearly achieved impressive improvement for the protection of the marine environment.

However the burden of this direct ownership and involvement should not be taken on lightly. TNC has invested large sums of grant funding in its own staffing, research and policy work related to the project. They have had to remain active and on the ground for the past five years amid long periods of great uncertainty. Also, as an owner of the key assets of the fishery, TNC has had to expand its role from that of an environmentally-focused NGO to an entity trying to balance economic, community and conservation goals. It is finding that it needs to help build new capacity in entities that can continue that multi-stakeholder balancing act as it plans its own exit from the leadership position. It is also finding that long term progress can sometimes be best achieved by working within existing policy frameworks and systems to promote conservation, using assets as a way to gain a seat at the table. It was important that they did not use their assets or buying power to circumvent existing policy or management systems.

Given these challenges, others should consider this type of engagement not just to achieve conservation gains, but rather if they have the resources and desire to play a much broader role in shaping the fishery. Ownership provides

great control, but also stewardship responsibility and opportunity to engage with government and the community in developing economic and policy solutions. NGOs or foundations seeking more limited engagement might want to consider other, less entrenched roles, where well placed financing of credit gaps, or appropriate technical assistance can also have positive conservation impacts.



THE SEA CHANGE INVESTMENT FUND

Equity Purchases Into Privately Owned Businesses

Logos of SCIF portfolio companies

In March 2005, the Packard Foundation and California Environmental Associates launched the Sea Change Investment Fund (SCIF), a "double-bottom line" venture capital fund intended to create financial returns for investors and conservation benefits for the oceans. The mission of SCIF is to connect sources of sustainable seafood with interested consumers, and prove that sustainable sourcing practices are good business for seafood companies.

SCIF invests in small and growing branded product companies that are on the front lines of a growing national marketplace for sustainable seafood. SCIF is funded equally from low-interest Program Related Investment debt from the Packard Foundation and private equity from independent investors. All its investments, which are primarily growth stage equity, are thoroughly vetted by SCIF's nine-member Conservation Committee as well as by a four-member Investment Committee.

During the due diligence process, SCIF's staff and Conservation Committee work with each prospective portfolio company to create a binding set of conservation terms that will guide the company's seafood sourcing practices. In addition to ensuring the ecological merits of each investment in the portfolio, the Conservation Committee provides an

innovative connection and cross-pollination between the two key stakeholders' groups: ocean conservationists and private equity investors.

SCIF's most notable achievement is providing a model for hybrid capital investment funds whose structure mitigates risk for both debt and equity investors. In this case, debt financing provided by a The David and Lucile Packard Foundation helped improve long term risk/return ratios for private investors in the Fund, and thus catalyzed an opportunity to make profitable financial investments in companies willing to maintain sourcing practices that support ocean conservation efforts.

OBJECTIVE: SCIF wanted to encourage private investment into the sustainable seafood business sector by creating an environmentally conscious venture capital fund for this purpose.

Investing in Sustainable Seafood Supply

As a long-time advocate for marine ecosystems and sustainable fisheries, one of the Packard Foundation's strategies is to leverage the sizeable power of the consumer market in order to create demand for sustainable seafood.

Over the last decade the sustainable seafood movement, with support from Packard, has succeeded in convincing many leading chefs, restaurateurs and seafood buyers to source products from sustainable fisheries and support the conservation of marine resources. Over the same time period, the Packard Foundation has also played an integral role in the effort to develop greater supplies of sustainable seafood, through support of the Marine Stewardship Council, Sustainable Fisheries Partnership, World Wildlife Fund and numerous other environmental NGOs.

INNOVATION USED TO MEET THE OBJECTIVES: SCIF established a hybrid debt-equity fund that uses Conservation Terms of Investment to lock in sustainability policies of portfolio companies.

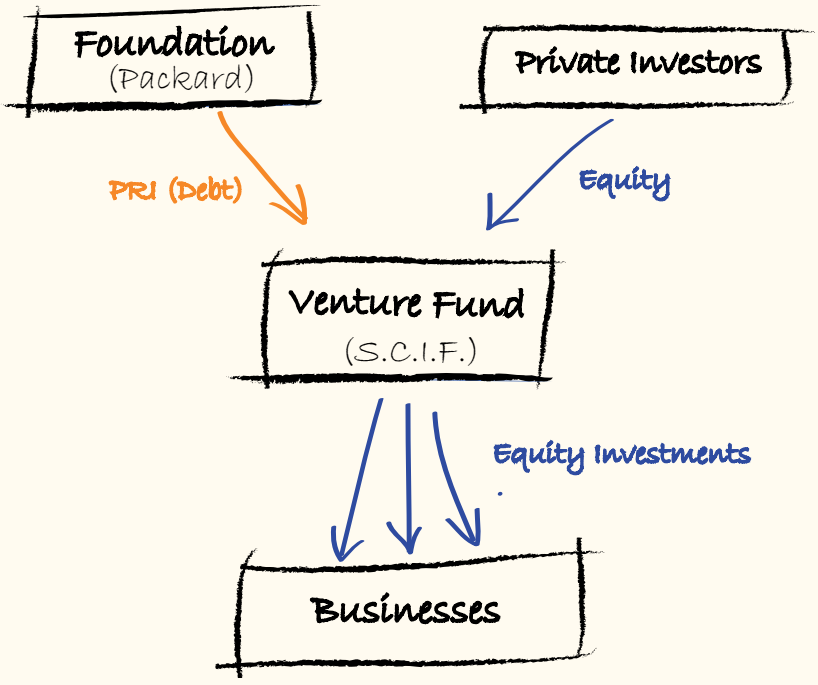
While demand for sustainably-sourced seafood has grown significantly, and supply has increased, the supply chain's ability to reliably produce and differentiate sustainable

seafood all the way from the water to the consumer has not kept pace. This market disequilibrium and information gap created an opportunity to invest in the sustainable seafood supply chain.

Packard's market research indicated that most commercial investors eschew the seafood industry because of its fragmented structure and narrow profit margins, characteristics even more pronounced in the nascent sector of the market attempting to provide sustainable products.

Creation of the Fund

Amidst anecdotal and market evidence suggesting burgeoning demand, Packard helped to create SCIF by authorizing a $10 million Program Related Investment (PRI) to the Sea Change Investment Fund, LLC. This loan, in turn, stimulated another $10 million in equity investment from a small group of private investors, bringing the total fund capitalization to $20 million.



By providing the capital necessary for expansion, SCIF helps create financial incentives, for the small-but-promising sustainable seafood industry to grow in new directions and build new relationships from both the supply and demand sides of seafood consumption.

Attracting Investors to the SCIF

SCIF's innovative hybrid capital structure significantly improves the appeal of investing in this sector to both debt and equity investors as well as to the beneficiary companies that receive SCIF equity investments.

Portfolio companies benefit from the hybrid capital structure of the SCIF because the low-interest debt that makes up half of the SCIF allows the fund, in most cases, to accept a more patient risk / reward structure than the broader financial market might otherwise provide.

From Packard's perspective, the hybrid structure allows it to offer PRI debt to achieve its objectives of helping businesses in this sector grow and leverage private funds, without crippling these fledgling businesses with debt themselves. Furthermore, the downside risk for Packard is limited: the PRI funds are senior to other investors - in the event of a sale or liquidation of one of the Fund's holdings, PRI loan principal is repaid first, plus any accrued interest. All management fees are paid out of the equity portion of the fund, not the PR. This protects the PRI from draining but must be carefully considered in the overall financial planning to ensure that adequate cash is available throughout the fund's life to retain management.

From the equity investor's perspective, the structure is also beneficial. After the loan is fully repaid, these inves-

FINANCIAL TOOLS EMPLOYED:
The Fund was created with PRI debt from a foundation matched equally with equity capital from private investors –invested as equity into a portfolio of businesses in the sector.

tors accrue 100% of the upside of the fund in the event of a sale or liquidation of one of the fund's holdings, significantly improving their risk/return calculation. As well as the financial upside potential, there are the benefits of the collaboration with Packard, who knows this sector well, and the critical role of the Conservation Committee in vetting the potential portfolio companies in this otherwise tricky sector.

The Conservation Committee and its Impacts

KEY LESSON FROM THIS CASE:
Creating an exit strategy is key for a fund's investments, particularly if the debt and equity investors have different risk profiles or profit making priorities. Exits must be carefully managed to avoid conflicts between paying off the PRI debt by its due date and gaining maximum value for equity holders.

To ensure that potential investments align with the funds conservation mandate, all investments made by the SCIF must be approved by a nine-member, independent "Conservation Committee" of senior marine conservation professionals from both the public and private sectors. Once the Conservation Committee has approved an investment, the opportunity is then thoroughly vetted by an Investment Committee that reviews all financial and commercial dimensions of the potential investment.

KEY ELEMENTS OF STRUCTURE:
Separate finance and conservation committees screen each potential investment and ensure that different stakeholders' goals are incorporated into the investment strategy.

By having each potential investment scrutinized from both a conservation and a commercial perspective, SCIF created a platform for learning and information sharing between conservation and finance professionals. Members of the Conservation Committee were exposed to private sector investors as well as some of the financial considerations behind sustainable seafood business operations, while members of the Investment Committee were exposed to the marine conservation ethos behind the fund's double-bottom line investment approach.

As SCIF evolved during its first five years, the fund's dual committee structure played an instrumental role in ensur-

ing that SCIF continued to emphasize ocean and fisheries conservation, while taking a balanced approach on potential financial returns. For example, SCIF's original profile investment was in the seafood processing and distribution sector as a way to create incentives for new businesses to enter the sector with a sustainability profile. However, SCIF learned quickly that capital requirements in the processing and distribution sectors were significantly greater than the small fund could provide. Consequently, SCIF, under the leadership and evaluation of its committees, refined its strategy to focus on sustainable seafood branded products. Branded product companies allowed SCIF to create explicit and binding sustainable sourcing protocols, while positioning the fund's investments for financially-attractive exits down the road.

For Packard, a key goal of its involvement is to assure that the conservation-oriented practices of these companies are encouraged and maintained through the investment period, and also that they are not abandoned after SCIF involvement is over. Although there may be no legal way to assure this, the conservation covenants that were put in place during the investment period seem to lock-in the sustainability standards of the companies as they grow, and set a bar against which new sources of supply are measured. These conservation covenants were individualized for each deal, but generally focused on establishing seafood sustainability standards for all product lines. SCIF expects that the company's brand, product quality parameters and supplier relationships will become closely linked during the growth phase to conservation criteria that are applied. At the time of SCIF's exit, these covenants could theoretically be changed but it is expected that the value

of these business practices will be well enough established that they will be kept in place.

Lessons for Investors to New Funds of This Type

KEY LESSONS FROM THIS CASE:
A mixed debt/equity structure and foundation involvement can make investment into new sectors of sustainable business more attractive to private investors by improving both sides of the risk/return ratio of the investment.

SCIF illustrates the potential of using debt financing from a private foundation to leverage private capital, and then deploying the combined pool of resources in the private sector to achieve significant conservation gains. Midway through SCIF's ten-year loan period (loan maturity in 2015), the fund has reviewed more than 100 investment opportunities, and now holds equity positions in six different sustainable seafood enterprises, each with significant financial and conservation merit.

As the first hybrid investment structure of this type in the seafood sector, SCIF provides similar endeavors a number of key lessons:

First, balancing a diverse set of investors with potentially opposing goals is difficult but can be overcome by establishing explicit conservation and financial investment standards, managed and reconciled by independent Conservation and Investment Committees. In this manner, potential investments are first screened to ensure adherence to strict conservation standards. If these standards are met, then more typical financial analysis can determine if an investment is suitable for the portfolio.

KEY LESSON FROM THIS CASE:
Binding "Conservation Terms of Investment" are critical to maintaining conservation benefits in each portfolio company throughout periods of growth and change.

Second, as an investment portfolio, SCIF's original mandate was to invest in small companies and prepare them for eventual acquisition by larger companies in the seafood industry. Upon a sale or liquidation, loan principal is to be repaid and remaining proceeds distributed to

equity investors. However, the timing of an exit can be very different for a foundation seeking repayment of principal on a specific date than the ideal timing for an investor seeking market conditions that render the highest return on investment.

Given the potential disparities in the timing of an exit from the portfolio, an explicit exit strategy should be created for each investment, but all investors must be comfortable with a fixed fund life, and committed to a lack of liquidity until that point is reached.

Third, while the Conservation Committee is an integral part of the process and ensured concrete gains in ocean conservation with each investment, regular gatherings of a large review panel, and lengthy debate on the merits of an investment make it difficult to provide investment capital expeditiously. The cross learning with finance professionals undoubtedly added value to both investor types, but the Conservation Committee process could be streamlined through a smaller committee size.

BEARTOOTH CAPITAL PARTNERS

Attracting Equity Investors to Land Conservation

Beartooth Capital Partners has developed a structure and fund that allow equity investors to participate in large land conservation and restoration projects which generate both strong financial returns and conservation dividends.

Critical to the success of Beartooth's Fund is the way in which its conservation work is integrated at the core of the firm's mission. For Beartooth's investment team, conservation serves as a competitive advantage in the marketplace and enhances the firm's ability to create value and mitigate risk in investments that take advantage of multiple layers of value in a property. Equally critical are the efforts of Beartooth's conservation partners and staff to find creative solutions that build shared value among stakeholders in the government, conservation and investment sectors. The firm depends on its conservation partners to execute on its strategy.

Beartooth's Methodology

Beartooth purchases large areas of land that have both conservation and commercial value or potential, working with organizations like The Nature Conservancy to identify parcels of interest which are either too large or expensive or otherwise difficult or impractical for the non-profit to purchase directly. Working with a range of partners, they then protect and restore the property while improving its

overall value through conservation easements, land entitlement changes, habitat restoration, and ecologically-appropriate limited development activities. Wherever possible, Beartooth enhances and captures non-development values through conservation easement sales and donations, innovative transactions like carbon sequestration projects, and by developing conservation enterprises such as ecologically-sound agriculture and timber operations, mitigation banks, and more.

Building and using partnerships in an efficient way throughout the process is key to each investment's success. Each investment starts by building a partnership with various players, beginning with initial information gathering and input from surrounding landowners, ranchers, non-profits and relevant government authorities on the property, its conservation values and its potential. Partnerships extend through the restoration, management and protection period to the deal exit. Each deal is structured so that the firm's environmental partners achieve important conservation successes while investors receive a financial return through the combination of conservation easement sales, parcel sales and other transactions.

Risk Mitigation and Partnership Strategies Add Value

Beartooth also serves as a good example because of the different ways they have specifically structured their operations to mitigate risk. The firm makes little to no use of debt, essentially eliminating the potential loss possible in leveraged real estate investments. Conservation easement transactions and funding for restoration provide early revenue events and offset expenses the firm would oth-

(c) Idaho Fish and Game

Wild Chinook salmon returned to spawn on and above Beartooth's Big Springs Creek Ranch in numbers never before seen after protection and restoration work was completed in partnership with The Nature Conservancy of Idaho.

erwise bear. Investors receive all the proceeds until they achieve an 8% preferred return, aligning management's interest with investors. The fund distributes revenues to investors as they occur during the 10-year term of its fund rather than re-investing proceeds in additional deals. The focus on risk mitigation has clear benefits to both investors and conservation partners.

KEY LESSON FROM THIS CASE:
Conservation-oriented projects can create significant value for equity investors. The key is placing conservation at the core of the mission, and building partnerships that capture and build on the values of different stakeholders - to ultimately support an outcome with dual financial and environmental benefits.

Beartooth further demonstrates that a for-profit legal status and strategy can bring an array of benefits to all parties. The firm's scale and agility allows it to address conservation projects that might otherwise be out of the range of either government or non-profit entities. Where appropriate, some of the parcels they purchase, once restored, are sold to local county or park authorities for public recreational use. These projects would have been too large, onerous, politically challenging or complex for local government or non-profits to take on themselves. It is important that Beartooth does not marginalize or compete for projects with conservation groups, but works closely with them for both technical assistance and due diligence on land acquisitions.

Photo by Jim Armstrong

Relevance for Fisheries Conservation

Beartooth Capital's work in real estate demonstrates that by creatively placing conservation within a sound investment strategy, sufficient value can be created to attract equity investors while achieving conservation gains that might not be otherwise possible.

There are similarities between ranchland as a real asset and certain assets in the fisheries world including place-based fisheries rights, marine protected areas, long-term

leases, catch shares and port services. As with Beartooth's work in ranch real estate, it may be possible for a conservation-oriented private investment firm to establish a fund that works in partnership with conservation groups and government entities to acquire and enhance the value of these sorts of assets to generate financial returns while simultaneously achieving conservation results that might not otherwise be possible.

PROMOTING CONSERVATION THROUGH TARGETED LENDING:

FILLING CREDIT GAPS USING DEBT INSTRUMENTS

In these cases, conservation is used as a screen to identify conservation-oriented businesses that have limited access to credit. Organizations using these strategies seek to use debt to support their conservation and/or social change work. The fact that conservation or social change is a key element of these strategies has allowed them to build a diverse array of partnerships at costs or under terms not available on the open market. We look at a diverse array of cases where the intent of conservation or socially oriented funders is to fill credit gaps, and thereby stimulate the growth and impact of the business or the organizations leading the initiatives.

CASES:

THE CAPE COD FISHERIES TRUST

Supporting Asset Purchase In Perpetuity, Through Direct Lending

Courtesy of CCCHFA

Paul Parker had spent more than a decade working closely with local small-scale fishermen as head of the Cape Cod Commercial Hook Fishermen's Association when a sweeping change to fisheries management in the region threatened to put them out of business if they didn't act quickly.

A longtime fisherman who has a background in biology and environmental management, Parker saw the pressure that transitioning to quota shares would put on family-run fishing operations. In 2005, Parker formed the Cape Cod Fisheries Trust (CCFT) to prepare for the impending transition to quota shares in scallop (2007) and groundfish (2010). He has subsequently raised a diverse multi-million-dollar portfolio that includes both debt and grant capital from a range of philanthropic, commercial, and local government sources. This diverse funding has allowed him the flexibility to manage the risks and uncertain cash flows associated with buying quota so that he can successfully re-lease them to local fishermen, keeping Cape Cod communities afloat.Fishermen Face Challenging Transition

Fishermen Face a Challenging Transition

New England's groundfish stocks, which include haddock, cod, flounder, white hake, halibut, and pollock, have been fished beyond their limit in the Georges Bank off the coast

of Cape Cod. Since the 1990s, fishery regulations attempted to protect populations by setting limits on the number of daily trips and days at sea. Opportunistic fishing operations adapted by pursuing larger hauls in shorter amounts of time, causing the regulations to backfire. In addition, fishing practices such as dragging negatively impacted the seafloor and compromised critical fish habitats, straining already depleted populations. And many fishermen were not properly incentivized to minimize bycatch so much valuable fish was wasted, dead and thrown overboard.

In response, regulators instituted a new quota share system. A set number of fishing permits allow only a certain volume of fish to be caught annually. While the system has environmental benefits, it had unintended negative consequences for small-scale fishermen. Permits can be traded and sold for cash, so when demand increases, prices escalate rapidly. Cod permits alone increased in value by 20 percent every year from 2003 to 2007. The economics are similar to the way taxicab medallions work in New York City: limited supply, high price. A single permit that cost less than $200,000 would be a bargain. For fishermen with only a few thousand dollars in their bank accounts, staying in the profession suddenly seemed impossible. large fishing companies with capital reserves were in far better positions to buy permits.

THE OBJECTIVE: CCFT wanted to protect the economic sustainability of waterfront communities and the livelihoods of the fishermen of Cape Cod, knowing that they would not have access to the capital needed to purchase quota shares if new management systems were put in place.

Developing the Trust To Fill the Gap

Before the new program launched, there was speculation that the fishery system would be changed but few were certain about the timing or the guidelines that would be used. While outside observers commonly regarded the Cape Cod Commercial Hook Fishermen's Association

as one of the leading detractors of quota shares due to their community concerns in the 1990's, Parker saw the writing on the wall and prepared to make lemonade out of lemons. Knowing that the change to quota shares would have adverse impacts on the Cape Cod fishermen if no community entity purchased and held quota in perpetuity, Parker and CCCHFA took action.

INNOVATION USED TO MEET OBJECTIVE: CCFT purchases and re-leases fisheries quota shares, and expects to hold the shares for community use in perpetuity.

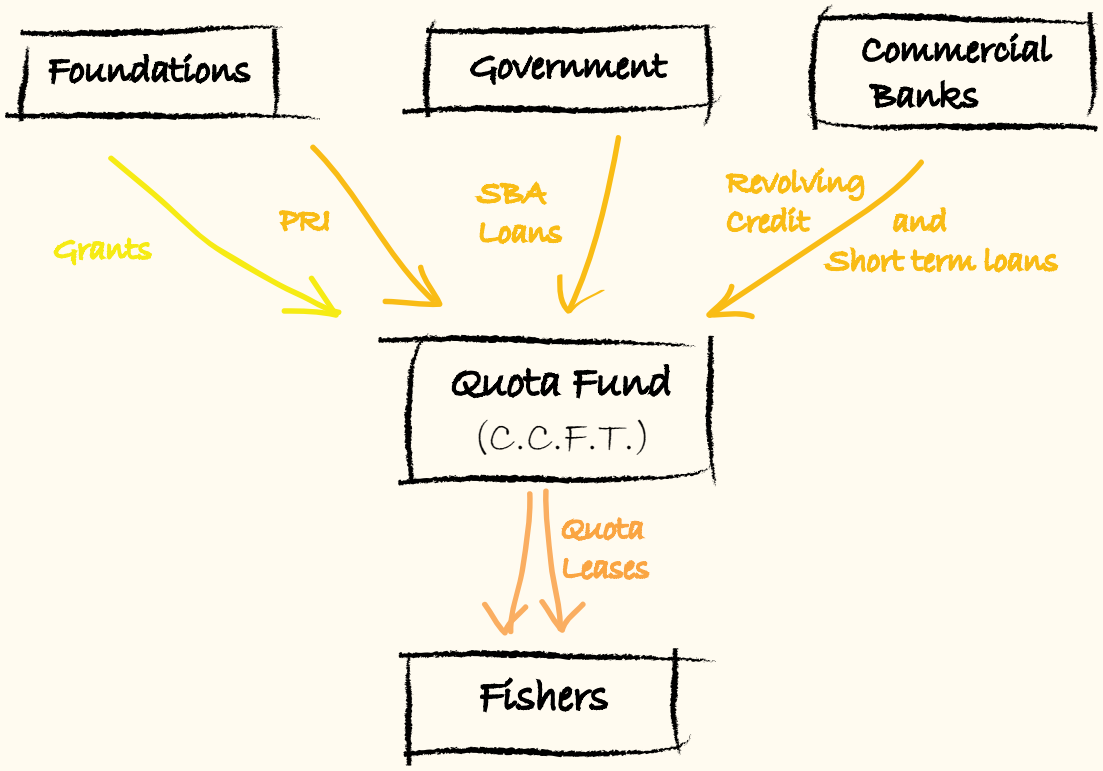
Parker created the Cape Cod Fisheries Trust to fill that gap and prevent those negative impacts. The Trust is owned by the Cape Cod Commercial Hook Fishermen's Association and managed by a local community development corporation. Parker stepped down as executive director of the Association to lead the Trust. While the quota system was still very speculative, Parker decided to buy permits opportunistically and then lease them to local small-scale fishermen who otherwise couldn't afford them. This would allow him to capture quota at relatively low prices early on, but it also carried significant risks for the association if the quota program was not implemented in a timely or fair way. Securing funding for the project and managing these risks led Paul to bring together a creative mixture of partners and financial tools.

Facing a Formidable Financing Challenge

FINANCIAL TOOLS EMPLOYED: CCFT has successfully gained participation from a diverse portfolio of small and large philanthropists, foundation PRIs, and revolving credit lines from local banks, supplemented with technical assistance from a local non-profit community lender.

The Trust faced a bind when it looked to acquire quota that becomes available for sale on the open market. To do so means having access to the necessary information to negotiate a fair price for the specific type of quota share on offer. Also, once quota is available to purchase, the Trust has to have cash available immediately for the deal. The difficulty is that investors need to be cultivated well

before permits go up for sale, but that cultivation must be done without any certainty as to when the funds will be needed and put into place.



Parker wanted to avoid having the Trust take out a loan for the entire amount to cover the quotas. That would have been unwise and far too risky for any single lender. Instead, the Trust pursued a combination of grants and low-interest program related investment loans from foundations. Diverse funding made the Trust's project more attractive to banks, lowering their risk on opening a line of credit to supplement it since there was already so much cash from the grants as collateral. So far, the Trust has successfully raised nearly $3 million for the quota purchases. Longer term, more flexible debt options including access to a line of revolving credit have helped the Trust work in this challenging environment.

The biggest challenge for this project is gathering knowledge about the value of quota and having it available in an imperfect market that contains many information gaps. The Trust has been developing financial models and information-gathering frameworks that may help them to access this data more readily in the future.

Balancing Competing Goals

Since the aim of the project was to keep quota in the community in perpetuity, there were limits on the types of capital Parker could bring in. Although the Trust did not need to make tradeoffs between financial and conservation returns, it did need to prioritize the social goals of the project and decide which types of financing would be accepted. Equity investors could not be brought in, for example. Those who were interested in investing in CCFT required an eventual exit from the investment by selling the quota, which was counter to the objective of the Trust.

While the project is driven by community preservation, sustainability measures have been fully incorporated into the Trust's leasing agreements. Fishermen are expected to adhere to all fishing regulations and to share detailed information on their catches. If additional conservation measures are required to maintain the fishery in the future, the Trust can add those measures because the agreements will be revised annually.

The Trust's diverse capital involves a variety of loans, each with different terms that include short-term, long-term, and revolving credit lines. This allows the Trust greater flexibility to manage its cash flows as it buys quota shares and begins to get lease revenues. The Trust learned the im-

portance of being strategic about how to meet the wishes of initial investors regarding the levels of guarantee and the recourse terms without compromising the potential for attracting subsequent investors who might decline if the first investors were given too generous terms.

Building a diverse capital portfolio that contains a mixture of both grants and debt makes the interest payments on the debt manageable from the project perspective, and it lowers the risk for the lenders, reducing the likelihood that the whole project will collapse without any recourse for investors.

Looking Ahead and Managing Future Risks

As the quota system evolves, the Trust is being proactive about addressing the risks and challenges that lie ahead. Recognizing that its capital needs will continue to grow, the trust is looking at a strategy to keep attracting diverse, and relevant, investors.

The Trust also has to address local fishermen's fears. They have expressed concern that the Trust will actually drive permit prices higher, compete with local fishermen for quota, undermine established lease rates, prop up unfit businesses, give unfair advantage to younger or poorer fishermen, and they also wonder if the Trust is actually necessary.

The Trust's close relationships with fishermen and their interpersonal relationships, as well as its longstanding presence in the community has helped ameliorate the risks and alleviate some of the concerns. Numerous fishermen who hold permits have approached the Trust and asked about leasing their personal quota as part of the leasing program.

KEY LESSON FROM THIS CASE:
Diversification of capital sources improves cash flow for CCFT, allowing it to take advantage of growth opportunities and to reduce risk to all investors.

During this early stage, the Trust aims to be as inclusive as possible, continue building strong relationships, and foster a high level of community participation.

KEY LESSON FROM THIS CASE:
A strategy that creates value for a diverse range of investors with differing motivations is necessary for large scale projects. In some cases, such as this, equity investment may be available but undesirable, if the long term goal is for assets to remain in the community in perpetuity.

VERDE VENTURES AND INTEGRADORA

Short Term Working Capital Loan, For Fishers To Establish Direct Sales To Customers

In Mexico's Yucatan Peninsula, reforms were implemented to address the decline in the harvests of spiny lobsters. These included new management as well as changes to local practices, such as adherence to fishing seasons, minimum size limits and no take zones, aimed at supporting sustainable harvesting by co-operatives of artisan lobster fishermen.

The new laws have created both an opportunity and a challenge for the artisanal fishers. While they were granted exclusive fishing rights to these waters and want to protect their resources and population stocks, the existing tight margins they face on the sales of lobster meant that any loss of volume threatens the viability of their business and livelihoods.

The non-profit NGO, Razonatura, directed by Kim Ley-Cooper in collaboration with park authorities and governmental environmental commissions, had been working closely with these fishers to develop new sustainable fishing practices.

In anticipation of the economic challenges the new legislation would present to fishers, the 6 main cooperatives of the state set up a for-profit company - Integradora de Pescadores of Quintana Roo (Integradora). The aim of In-

tegradora was to promote the fair trade and responsible commercialization of local sustainable seafood, primarily lobster.

Building a Sustainable Seafood Brand - CHAKAY

With the support of their partners, the fishers collectively improved the fishery habitat over time, through responsible harvesting, and with a monitoring scheme that reports on the overall health of the fishery. Juvenile lobster survival rates and recruitment have increased through the use of artificial lobster refuges called "casitas", which are small, covered "shades" on the seabed. Participating fishers also adhere to minimum size restrictions, the return of egg-bearing females, respect no-take zones and off-seasons. Fishers also actively participate in tagging and data gathering for research and reporting purposes.

These gains in resource conservation are now being leveraged into product branding. The six regional fishing cooperatives have banded together under Integradora to build a brand, named "CHAKAY." The brand represents more than 300 fishing families, each allocated a specific, geo-referenced area of the biosphere reserve in which they fish, which is effectively their own, exclusive fishing ground – and each committed to sustainable fishery practices as explained above.

The CHAKAY brand sells its wares in professionally produced packaging developed to convey the local, sustainable nature of the lobsters and their origin in nearby biosphere reserves. The group is attempting to secure Marine Stewardship Council certification as well as fair trade certification, both of which are expected to give CHAKAY a

marketing edge over time. Fishing families hope to earn a premium on the lobsters they sell under their brand.

Stuck at the Bottom of the Supply Chain

OBJECTIVE: Razonatura & Integradora wanted to help maintain the economic incentives for lobster fisher cooperatives to continue to fish lobster sustainably in one of Mexico's community managed Marine Protected Areas.

To quantify and capture this premium, Integradora undertook a study of the value of lobster products throughout the supply chain and of the competitive environment for lobster products. They found that, despite supplying more than 50% of the lobster market in local tourist destinations, the Integradora fishing cooperative members were selling their product to local intermediaries at a price far lower than it is worth. The reasons were simple.

As in many fishing communities, middlemen in Cancun take advantage of fishers' lack of financial resources, specifically working capital. The well-financed middlemen are able to pay fishers in cash immediately for their lobster harvest, usually right at the dock, while at the same time they allow buyers such as hotels and restaurants to delay payments for their lobster for up to 60 days. These middlemen have the financial resources that enable them to "carry" buyers for this duration. Fishermen are usually unable to bear this payment gap, and the associated uncertainties, and so cannot sell directly to buyers, even when they have the needed connections.

Most middlemen also have access to sophisticated storage and freezing facilities. Even if fishers were able to deliver their harvest directly to retailers, and finance the carrying costs, without a facility to freeze and store lobsters they would be unable to take advantage of price escalations during the off-season, when lobster prices climb up to 30% above their normal prices.

Supply Chain Finance and Short-Term Working Capital

Integradora developed a business plan to address these two issues. They focused on developing a distribution and sales program that is both more efficient and more direct. This program allows participating fishers to obtain higher prices for their lobster products, by eliminating the need to pay middlemen. Integradora has also built a cold-storage to accumulate any inventory for sale during the higher off-season prices, allowing cooperating fishers an opportunity to negotiate prices and to hold back inventory during periods where there is excess supply on the market. At the same time, buyers benefit from this arrangement, as they can maintain current business practices, prices and payment terms, while receiving high quality, sustainable local products with a brand that helps their own corporate images.

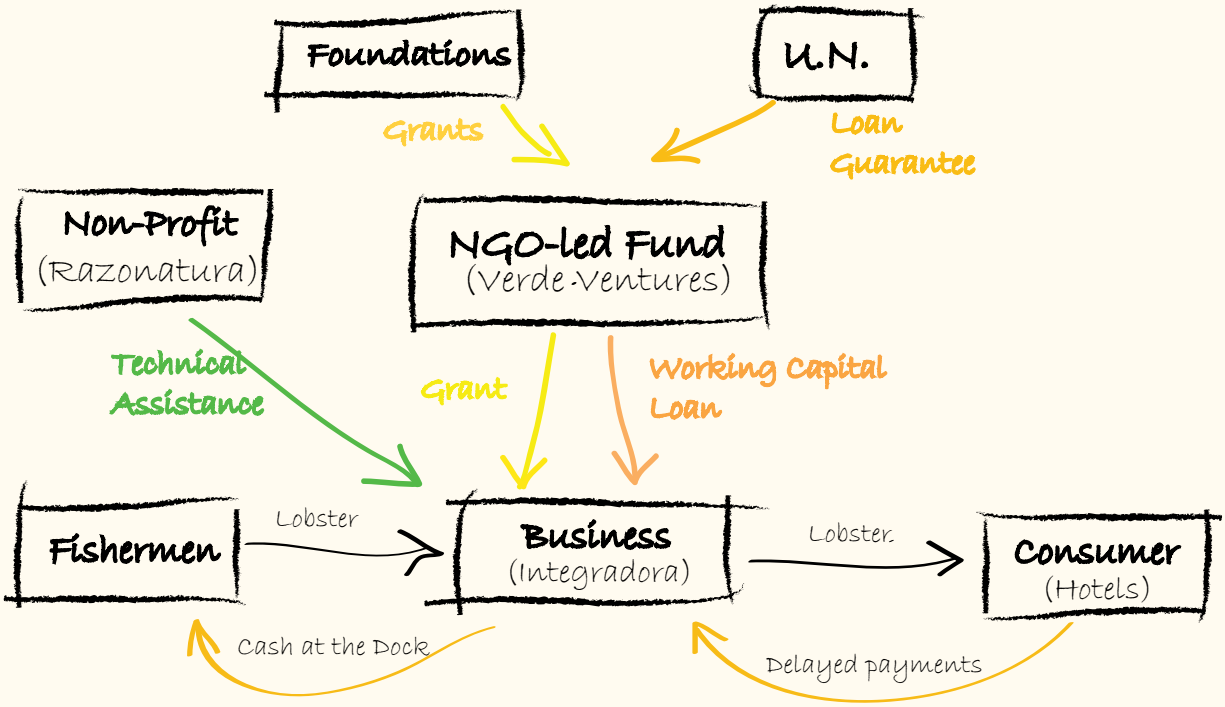
Recognizing that the most critical barrier for Integradora in implementing these solutions would be working capital, and that the business would need to contend with a local banking culture that was unwilling to offer credit to a venture without a sales and credit history, Integradora approached Verde Ventures, an investment fund financed by PRI capital and managed by Conservation International (CI), to ask for support. The Verde Ventures fund was specifically set up by CI to provide support for small- and medium-sized businesses that contribute to healthy ecosystems and well being.

Verde Ventures was able to offer Integradora a one year loan for $30,000 at 12% interest to be used specifically for working capital to address each of the supply chain

SOLUTION IDENTIFIED: A supply chain study showed that with working capital and a shorter supply chain, the fishers could both accumulate inventory for lobster sales during closed seasons and gain additional profit from sales by through direct distribution to hotels and restaurants.

constraints described above. Integradora hopes to be able to pay back the loan as agreed within one year, after which there is an option to renew for a second year.

Additionally, through state assistance, Integradora managed to secure a storage space in downtown Cancun, close to its principle buyers and opposite a large tourist market. Some of the first year's Verde Ventures loan will be used to acquire refrigeration units to be installed into this storage space – which will facilitate inventory accumulation and sale in the off-season for participating fishers.



Adding Value Beyond the Loan Financing

As well as overcoming the working capital barrier, the financing arrangement with Verde Ventures has had other benefits for Integradora.First, Verde Ventures was able to secure a 75% loan guarantee from the World Heritage Local Ecological Entrepreneurship Program (LEEP), a partnership between the UN Foundation, UNDP and Verde Ventures. In this respect, Integradora not only builds creditworthiness and trust in the eyes of Conservation International, but a broader group of international institutions.

Second, in pursuing a business loan rather than grant financing to support this endeavor, Integradora has been able to develop its business capabilities and skills, including conducting financial modeling for the new distribution model. To support Integradora during this capacity building phase, Verde Ventures offered Integradora a small technical assistance grant, alongside the loan funds, to support the implementation and training for a cost accounting system.

From Conservation International's perspective as an investor, Integradora presents an excellent opportunity to demonstrate that sustainable fishing practices can be economically viable for local fishermen. Helping support this type of business/ non-profit hybrid structure and assisting a fishing cooperative based company shorten its supply chain to capture the value of the sustainable fishing practices is a goal in many parts of world. It is hoped that the Integradora experience might be replicable for other communities working under similar conditions.

FINANCIAL TOOLS EMPLOYED:
This project has included a 1 year, 12% interest working capital loan from Conservation International's Verde Ventures fund, backed by a UNDP loan guarantee for 75% with co-funding from Razonatura for technical/commercial assistance.

KEY LESSON FROM THIS CASE:
Choosing the right type of capital for this specific need - in this case a loan - creates value in the project by simultaneously addressing multiple growth and development needs for the cooperative.

Key to the conservation success of this venture, however, is the community and organization's strong and established commitment to sustainable management of the protected area, and the enforcement of fishing regulations in the area. These ensure that the economic incentives to keep the fishing stocks strong and healthy into the future will remain, even as the access to markets and profitability are improved.

THE NORTH PACIFIC FISHERIES TRUST

Filling Credit Gaps Through Re–Lending Programs

In the late 1980's, fisheries off Alaska's coasts were significantly stressed by overcapitalization of the fleets, resulting in too many boats participating in a failing fishery. As part of a larger effort to help the fisheries stocks recover, Alaska transitioned some of its fisheries to a quota share system in which individual fishers were granted a specific portion of a fishery's total annual harvest.

While the quota system helped the ecosystems recover, it created a problem for local fishing communities, especially small scale fishermen who were granted insufficient amounts of quota (based on reported catch history) to operate efficiently, under the new business models demanded by quota share systems. These same fishers also could not afford to buy the amount of quota they needed, since they lacked cash or collateral to qualify for commercial financing.

Without training in long term asset management, and without any established trusted intermediaries to help owners to manage quota leasing operations, or access to credit to cover their short term cash flow needs, community members saw no alternative but to sell their quota share holdings to the outsiders from larger well capitalized operations who were eager to grow their asset bases.

The rise of quota prices and sale of shares to outsiders threatened the very economies and survival of indigenous communities. The consequences included not only the direct loss of fishing activity associated with the quota shares, but also the transfer of fish landings to other ports , causing increased supply risk for processing and value-add facilities, upon which community employment depended.

In response, a special category of nonprofit community organization, called a Community Quota Entity (CQE) was administratively approved by the North Pacific Fishery Management Council in 2002 with the objective of helping local communities to buy, hold and lease quota shares in perpetuity for these local indigenous fishers, and to improve the long-term economic prospects of their communities. Though the CQEs were established and granted specific and unique rights to hold quota share, they were not capitalized or otherwise financially empowered to acquire the quota that they needed to perform this role. They depended on commercial financing organizations which required collateral and equity that these newly established CQEs did not possess. As a result, the CQE program had no active participants for many years.

To address this problem, Ecotrust, an NGO with broad experience in innovative financing in forestry and fisheries, approached the Packard Foundation to help them bridge the credit gap faced by the CQEs and their community-based fishers.

Under-capitalized Community Quota Entities

The management transition to a fishing quota system was originally intended to help conserve Alaskan marine eco-

OBJECTIVE: Ecotrust wanted to help small scale community -based fishermen who could not afford to buy quota share when the management system for the fishery transitioned. They wanted to keep fishing jobs in the community, thereby ensuring the survival of local economies.

INNOVATION USED TO MEET THE OBJECTIVE: NPFT was created to lend funds to local CQEs and CFAs (community quota entities and community fisheries associations) so they could purchase and subsequently lease fisheries quota shares to local community members.

systems and it appears to have been largely successful in that regard, but its unintended economic effects continue to negatively affect the small-scale fishers in the region.

The CQEs the North Pacific Fishery Management Council created were supposed to fix this problem. By holding quota within the community, and leasing it to the fishermen, it could reduce the upfront cost needed and the business risk for a fishermen who buys quota himself- allowing new entrants to come into the fishery and cultural traditions to be passed down to the next generations. The fact that the CQE would hold the quota in perpetuity also supported community stewardship. In particular, the CQEs are required to lease portions of the quota share they own to indigenous community residents, thus ensuring a fishing-based economy for these residents.

However, CQEs, as administrative bodies were only legally enabled, but not sufficiently capitalized either with cash or with grandfathered quota. Without sufficient collateral or cash to qualify for commercial financing, they were unable to purchase the quota share needed to meet their community based objectives.

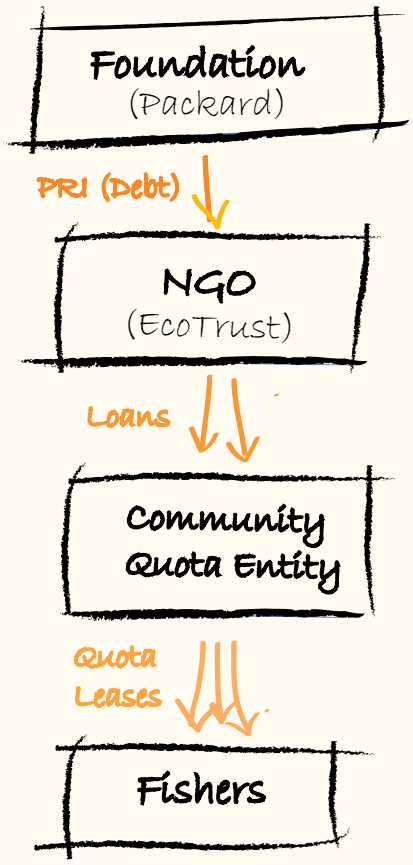
NPFT Works to Fill the Financing Gap

In 2005, in an effort to help CQEs live up to their potential, and to shepherd small-scale, sustainable fishing, the Packard Foundation extended a $5 million Program Related Investment to Ecotrust to form the North Pacific Fisheries Trust (NPFT). Packard's PRI loan is for seven years, and charges NPFT 2% per year interest.

NPFT, in turn, was to re-lend these funds to Alaskan CQEs in order to help the community-based entities buy quota

shares and lease them to fishers. Proceeds from the lease payments made to CQEs were to be used to repay the loan to NPFT, who ultimately must repay the loan funds to Packard.

NPFT's long-term vision was to establish the creditworthiness of local CQEs and strengthen their balance sheets to an extent that CQEs could then obtain refinancing on the remainder of the loan from commercial sources (using the equity accrued during the PRI term as collateral and the lease payment histories to support cash flow projections). The CQEs' primary source of asset accumulation is the equity they build over time through payment of principal made over time to NPFT, much like a homeowner builds equity through mortgage payments.



Conservation Practices Formalized

NPFT originally planned for CQEs to be able to lease quota to fishers at prices below the market rate for quota – and to ask participating indigenous fishers to agree to a series of conservation covenants in return for this benefit. However, competitive private lessors of quota were quick to point out that the NPFT would, in effect be subsidizing conservation if they were to follow through on those plans. Private lessors wanted lease rates to remain consistent and, in return for a mutual agreement on lease rates, agreed to adopt a series of conservation covenants that would apply to the industry as a whole.

This negotiation process resulted in agreement that the conservation covenants would reflect the current best practice in the fishery at the time. These best practices had been informally agreed upon by the fishers in the community but not bound through any regulations or forma agreements. Though the agreement with NPFT moved the conservation bar very little beyond what had already been achieved, it resulted in formalization of best practices in the fishery and in application of the covenants to a much broader range of stakeholders than just those leasing quota through the CQEs.

FINANCIAL TOOLS EMPLOYED:
NPFT was supported by a PRI loan from the Packard Foundation to Ecotrust, a nonprofit. Funds were re-loaned to CQEs and/or CFAs for purchase and subsequent leasing of shares to local fishers. The quota shares are intended to be held in perpetuity by the CQE and become a community asset.

Quota Price Inflation Changes the Business Case

Shortly after setting up the project, Ecotrust and Packard quickly faced a number of difficulties, which, though they may be primarily relevant to the specific Alaskan policy and economic context, are well worth highlighting for some general lessons that they bring forward.

The project was based on the assumption that access to capital to purchase quota shares was the main barrier to CQEs purchasing these assets. By the time the project funding was in place, however, there was a different, more fundamental problem: quota share price inflation. The prices of quota for some key species, such as Halibut, rose dramatically in the first year of operations, seemingly spurred by two reasons. Regulatory changes raised the cap on the maximum number of quota shares that a single individual could own. Fishers who had received grandfathered quota, and whose fixed costs were mostly covered, were willing to pay a high price for additional quota shares to expand their businesses. For them, the marginal costs of fishing more volume were quite low in relation to the variable income they could derive from fishing this extra quota using existing equipment, fuel costs and other infrastructure. Quota prices also rose due to speculative buying by outsiders who viewed the quota shares as good long-term investments which might not be available later.

Although the price of quota shares rose, the price of fish at the dock did not change. This was because the larger businesses that had economies of scale, or individual fishers who had had grandfathered quota share granted to them, were able to continue to sell fish profitably at the existing low prices, maintaining their current buyer contracts and relationships.

This meant that quota "lease rates", which are typically set at 45-50% of value of the fish captured, could not change either. Just like rents remaining low during a housing price boom, the lease rates for quota and purchase price of quota became increasingly disconnected.

CQE Plan Squeezed by the Price Rise

The divergence between the quota prices and the lease rates created a problem. The CQEs were supposed to take on debt to provide leased quota, but the investment did not add up any more: the quota they were trying to buy had shot up in price, while the revenue they could get for leasing it had not. Almost all of the lease payments they could get would go towards repaying the interest on the larger loan packages, slowing the equity accrual significantly.

The original plan had been for the CQEs to accrue sufficient equity during the 7-year NPFT loan period in order to qualify for a commercial refinancing before the end of the term. With the new disconnect between quota costs and lease revenues, this was no longer possible - the CQE could not make enough from the leases to accrue equity fast enough for refinancing to be possible or to cover their administrative expenses for the leases.

Though there was demand by fishers to lease this quota at established market rates, these rates simply could not support the leasing businesses without either longer term loan periods, lower interest rates, or grants for asset acquisition or operations being made available to CQEs.

The ultimate effect of the quota price changes and the resulting mismatch of funding terms to actual projected cash flows and equity accrual rates, resulted in very low deal flow, with only a small portion of the NPFT funds being successfully placed with an Alaskan CQE.

Lessons from the NPFT Experience

Ecotrust's NPFT experience, using both examples of its successes and failures, has been generously shared, helping other organizations such as the Cape Cod Fisheries Trust to structure projects utilizing PRIs to finance re-lending or other quota acquisition initiatives. Though conservation gains were not significant for this project, it has provided useful lessons on how low-cost financing, provided by a private foundation, might be used by NGOs to finance small scale local fishermen who lack the capital to participate in a quota share market transition or to acquire enough quota share to run their businesses at an efficient scale.

An important lesson for such projects is that any intervention in quota share markets needs to be done with an intimate understanding of the market risks and dynamics as well as of the financial needs and constraints of target stakeholders. Though Ecotrust completed significant amounts of due diligence and financial analysis prior to taking on the PRI loan, the unexpected pricing changes made their financing package unattractive to their target beneficiaries, slowing deal flow to a trickle. Market conditions can change considerably over the 6-12 month lag time that can be typical for development and approval of a PRI. A project's financial assumptions must therefore be rigorously tested to be sure it can withstand market and pricing changes that occur during that time.

The Ecotrust experience has given broader insights into the challenges which dynamic and opaque quota share markets can create, especially when regulatory changes are implemented unexpectedly. Experience shows that quota prices should be expected to rise or fall as man-

KEY LESSON FROM THIS CASE:
Deal flow and project structures of re-lending projects can be uncertain until specific terms start to be negotiated among interested participants.

A learning phase should be planned into projects, with PRI funds either held by the foundation until the capital is needed, or granted and returned to the foundations within a specific time-frame if the demand for the debt does not materialize.

agement entities change regulations around the number of quota blocks an individual or entity may hold, or around the total allowable catch (TAC) of a fishery. As many of these policy changes are reactive to science data that is not openly available and cannot be foreseen, there is need for financial projects based on quota acquisition to be developed with enough flexibility and elasticity in financing terms to adapt in real time to management change. Modeling project outcomes under extreme pricing fluctuation, quota cap changes or TAC changes should be standard practice so that fund managers can understand the possible scenarios that they might want to be prepared to address.

KEY LESSON FROM THIS CASE:
If a project´s exit strategy depends on refinancing, and the refinancing will depend on the equity accrual rate during the PRI term, then adequate flexibility must be built into the project financing structure.

Secondly, a PRI project in which the exit strategy is based on commercial refinancing needs to have additional flexibility built into its financial terms. PRI recipients will need to have enough flexibility in terms of their own capital structures to be able to help their beneficiaries to adapt to changes by offering them the ability to modify their loan terms, to qualify for grant funding under certain scenarios, or make other modifications if the underlying economics of the project change, as they did in this case. Foundations also need to think, up front, about the fact that a strict exit timeframe may not be feasible for projects of this type, since not all loan recipients may be able to successfully refinance their debt within the given time frame, especially if loans are not disbursed to recipients at the same time.

Given the pioneering and experimental nature of this project and others in the emerging quota markets, a hands-on learning phase would have been very helpful. The challenging market dynamics and other insights Ecotrust

has gained would have been difficult for them to understand before they began, as they were the first to develop a project in this market. Formalizing a learning phase for NGOs starting work in these conditions would allow these NGOs to negotiate loan terms with potential beneficiary organizations. The true demand and financial feasibility for a debt product could more accurately be gauged during this learning phase as well as the NGO's long term ability to repay their debt. Learning phases could be capitalized with small initial tranches of PRI funds, with the larger funds for the relending project held as committed until the lead NGO makes a "capital call." During the learning phase, all parties could jointly consider re-aligning strategies and funding structures and timelines based on what is discovered.

Lastly, when organizations such as CQEs are newly established to fill gaps in their local communities, they are typically under-resourced in human and financial dimensions. A possible way to solve this would be to include grant support for administrative services, technical assistance and capacity building to CQEs or to organizations such as Ecotrust to remove the operating costs of the project from the debt burden. Funders might also consider providing needed loan guarantees directly to the CQEs or other community organizations, instead of PRI funding, to complement and support commercial financing. If well structured and conditioned on specific conservation covenants, foundation backed loan guarantees might both be used to support conservation and to allow CQEs' or similar organizations to build direct long term commercial lending relationships from the outset, with technical assistance from Ecotrust and others.

JOHN D. AND CATHERINE T. MACARTHUR FOUNDATION

PRIs and Partnerships to Facilitate Working Capital Loans for Arts Grantees

The MacArthur Foundation has established a loan fund for its arts and cultural grantees that specifically addresses their working capital needs, bringing in two key partners to successfully add technical assistance and financial experience to the fund.

MacArthur has relationships with a range of small and mid-size arts organizations which it supports with general operating grants. Arts organizations earn income from exhibitions and shows which they create- but must fund the development of these events up front, and later regain costs from ticket sales. This cycle can create significant gaps in working capital. Traditionally, organizations try to obtain commercial revolving loan funds to cover their needs. However, smaller and newer organizations have difficulty in getting approval from banks for revolving credit, and even larger organizations are viewed as credit risks by banks. When recessions hit, non-profits, which are viewed by many banks as high risk clients, are often the first to get shut out of lines of credit.

Structure of the Loan Fund

In response to this trend, the MacArthur Foundation has set up a Working Capital Loan Fund specifically targeting their Chicago-based Arts grantees. The PRI -financed Fund offers short term "bridge loans" of $25,000-$50,000 for

a term of up to 6 months, as well as a standard line of credit of $50,000-$100,000 with a term of up to 1 year. The loans are made available to grantees that have an expense budget of between $250,000 and $3 million per year. The aim, in addition to meeting a specific current cash need, is to improve the grantees' overall financial capacity as well as help them build savings for collateral and a credit history for a future relationship with commercial banks.

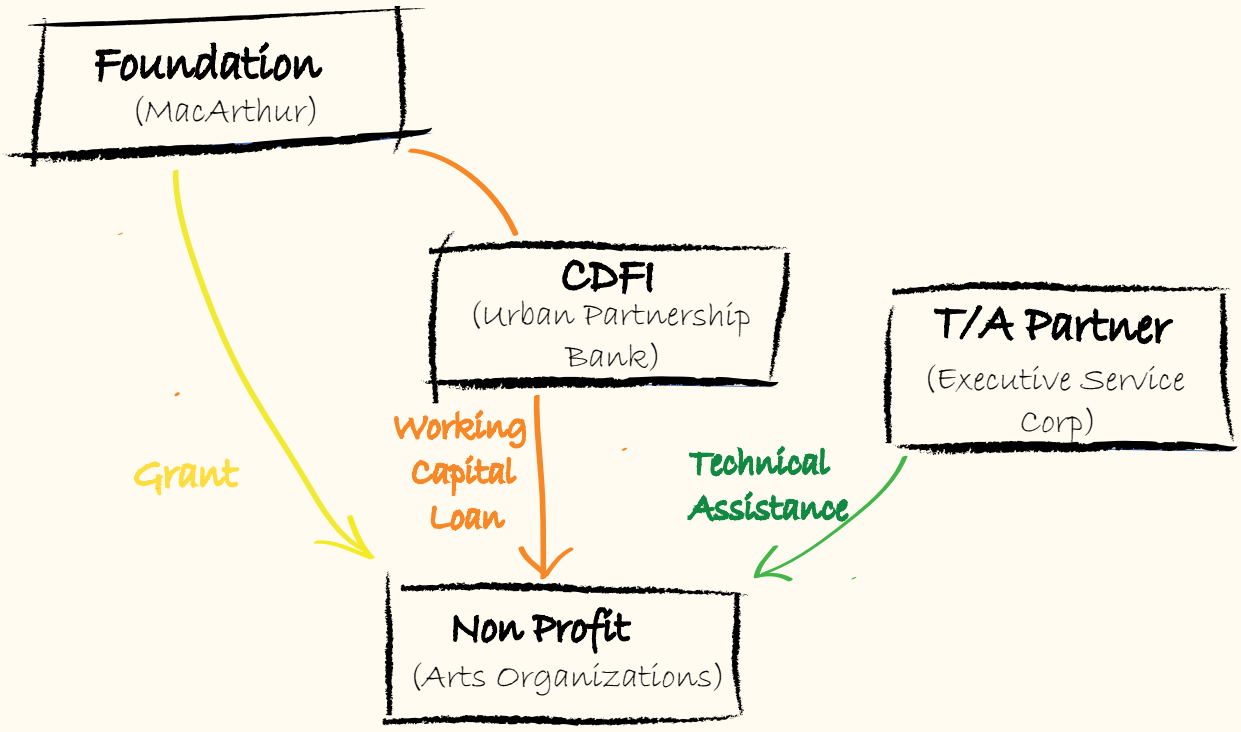
The idea is simple and practical, and the way it has been set up is efficient. MacArthur set up two important partnerships to deliver the funds. The Executive Service Corp of Chicago, a non- profit, provides technical assistance and screening; its experienced, volunteer consultants assess the nonprofit grantees to ensure that they are qualified for loans. They also provide applicants help with the financial planning to apply for loans and ongoing technical assistance during the loan cycle. This technical assistance is offered as needed, with no obligation to take it.

OBJECTIVE: MacArthur wanted to help its grantees meet their working capital needs as well as build their financial capacity and credit history.

Urban Partnership Bank (formerly Shorebank), a Community Development Financial Institution (CDFI) with deep experience making loans to non-traditional clients, is charged with processing applications, underwriting, disbursing, and managing the loans. The establishment of savings accounts are encouraged by UPB for all loan recipients, so that they can build future collateral.

Relevance to Fisheries Conservation and Other Fields

This PRI-financed loan fund is a great example to foundations seeking to provide needed financial training and



working capital to grantees in their portfolio. It recognizes the need for working capital to complement the grant capital the foundation is already providing and the need for support of revenue generation activities that build long term financial health. It also builds financial know-how and credit histories for organizations.

The structure, which uses partners to deliver the funds, intentionally segregates the Foundation's grant making from its loan giving, which helps both grantor and beneficiary separate the objectives and responsibilities associated with these two types of support. Depending on UPB to deliver and manage the loans not only avoids a major administrative burden, but taps into UPB's financial and nonprofit experience as well. Finally, the partnership with ESC recognizes the important need for technical assistance and a pre-qualification screen alongside this financial offering, to help build the long term capacity of the grantees.

As a testament to this structure MacArthur reports that to date, this fund has experienced no defaults at all, and that similar funds across the country have also experienced very few or no defaults.

Foundations providing grants in the fisheries sector should look to this model to achieve significant impacts in the sector. Using a similar fund structure and partnerships, they too could offer complementary working capital loans, coupled with optional technical assistance to strengthen their grantees financial planning skills.

ENABLING CONSERVATION BY COMBINING SERVICES AND CAPITAL:

INCUBATING AND FINANCING TO PROMOTE BUSINESS DEVELOPMENT

When a business has been created for the purpose of creating a positive environmental impact as well as a financial return, providing technical assistance to incubate or grow that business can be the best way to achieve a philanthropic or commercial investor's conservation objectives. We look at four such cases, where incubation and technical assistance has been combined with capital to help social or environmental entrepreneurs create and scale their businesses.

CASES:

ISLAND INSTITUTE & THE PORT CLYDE CSF

An Incubator Helps a Community Fishery Association Succeed

Photo by Peter Ralston

Years of over-fishing and dwindling seafood harvests have chipped away at the livelihoods of fishermen in coastal Maine. Accompanied by ever-increasing fisheries regulation to curb resource depletion, fishers were limited in the number of days and ways in which they could fish. Communities struggled to keep long-time fishing families on the water and historic waterfront areas alive. In 2006, in an effort to preserve their way of life, and to try to safeguard the ocean resources that sustain their communities, a group of sustainability minded groundfishermen founded the Midcoast Fisherman's Association (MFA) in Port Clyde, Maine.

In its early days, the nonprofit MFA planned to save the community's small fishing fleet by promoting more sustainable fishing practices and thus bringing a higher-quality, and higher-priced, product to the market. MFA's endeavors included employing gear improvements to reduce fuel costs, bycatch and negative habitat impacts. MFA also initiated a marketing campaign to brand its catch as Port Clyde Fresh Catch, attempting to give consumers an immediate association between their label, their community and local, sustainably harvested products.

MFA's breakthrough strategy came out of a phone call with a university researcher interested in exploring the possibility of adapting the Community Supported Agriculture concept (CSA) to seafood products. CSAs allow consumers to pre-pay local producers for a guaranteed stream of produce throughout the season with deliveries of fresh harvested products on a regular basis. The prepayments by consumers are used by farmers to cover working capital costs in the interim and to lock in sales volumes. The MFA decided that they could be the first community to experiment with this marketing concept for seafood products.

OBJECTIVE: Island Institute wanted to help an emerging community-based sustainable fishing organization to grow and develop business processes so fishers could make more money, while catching fewer fish, without creating dependency

In early 2007, MFA pre-sold shares of its shrimp harvest to local church members. The program was popular and the innovative idea was picked up by several local and regional media outlets. Due to the media coverage that the small business generated, calls began to come in from surrounding community members who wanted to purchase CSF shares. This Community-Supported Fishery (CSF) was able to deliver high quality fresh products direct to consumers and pay fishers twice the dock price offered by other processors - creating interest in CSF participation by local fishers. Over time, they have been able to successfully grow this model to build both fisher participation in sustainability efforts and a direct dock-consumer sales program.

Establishing and Growing the Community Business

MFA's experiment with direct distribution proves that sustainably-harvested seafood can earn considerably higher prices, and that regional consumers are interested in sup-

porting their local community of fishers and in receiving high quality fresh products.

However, growing the concept has posed many challenges for the fledgling CSF. As demand came in from an increasing broad regional area, requiring higher transport, human resources and storage investments, the fishers struggled to fairly and profitably price CSF shares. Fishers had to learn about pricing and about building a business structure to meet this demand. At the same time, they also had to learn about fish handling techniques, processing, and packaging products for a broader range of clientele. Fishers learned that, although the local community members had been happy to purchase whole fish, that most consumers wanted pre-filleted products. This required the fishers to invest in processing, cutting and packaging equipment and to learn about food safety requirements.

As the viability and challenges for growth of the CSF business model became apparent, MFA partnered with the Island Institute, a local community development organization that assists Maine's waterfront communities. With the Island Institute's assistance, MFA created a for-profit company, the Midcoast Fishermen's Cooperative (MFC), intended to develop the CSF business model and Port Clyde Fresh Catch brand.

This support of the Island Institute was complemented by the contributions of individual fishers and community members. For example, the prepayments by CSF consumers could not cover the capital costs of all of the equipment and human resources needed during a single fishing season and the MFA needed to find financing to grow its operations. With no collateral of its own and as a new

organization, MFC could not secure a credit line from commercial sources, until one of its members put up a personal guarantee for the loan.

Playing the Role of the Incubator

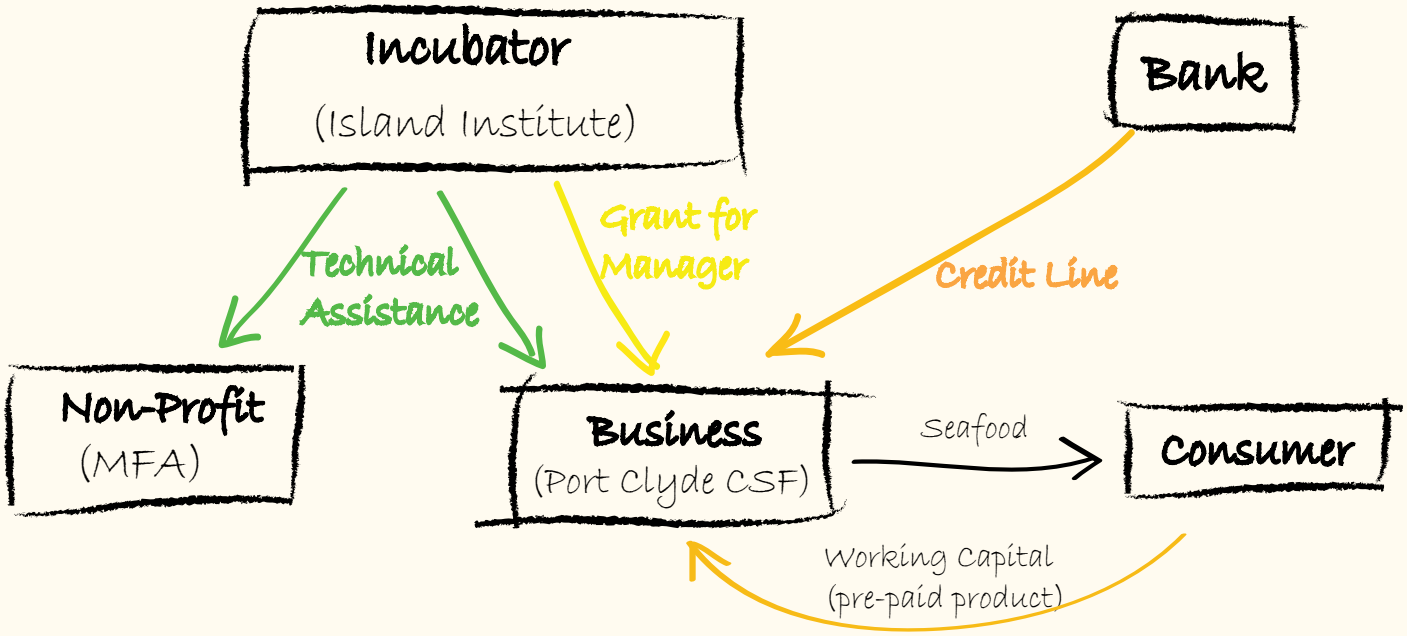
Though the members of the newly established for-profit MFC provided the driving vision for the business as well as the expertise on the water, the Island Institute's deep experience in helping revive Maine's coastal communities was critical in incubating the business cooperative. During the MFC's formation, the Island Institute provided basic assistance for administrative and human resource needs, such as arranging worker benefit packages and managing its payroll. The Institute also retained legal support for MFC in order to maintain a clear legal separation between the nonprofit MFA and the for-profit MFC, a particularly complex issue since, given the small size of the Port Clyde community, both entities shared nearly identical board membership.

As demand for MFC's products quickly grew, its business operations needed to be developed. The Island Institute provided support, including business plan development, guidance on pricing, appropriate distribution systems, and infrastructure requirements - among an array of everyday business issues that arose from time to time.

Perhaps most significantly, the Island Institute obtained a grant to recruit and secund an experienced marketing manager to MFC to help build its nascent brand and increase market awareness of the association's sustainable seafood product. In recognition of the time it takes to build a brand such as this, Island Institute obtained

INNOVATION USED TO MEET THE OBJECTIVE: The Institute played an incubator-type role, providing business support, guidance and access to funding while allowing the project leaders to make key decisions.

funding for a three year term for the manager. In the interest of the long term financial independence of the MFC, they took great care to negotiate a salary level for the position that could likely be sustained by MFC after the three year grant expired.



FINANCIAL TOOLS EMPLOYED:
The project made use of working capital from sales of harvested products, and grants from the Island Institute to provide MFC with technical assistance and human resources, as well as commercial lines of credit to provide MFC working capital.

Conservation and Social Impact for Port Clyde

MFC's sustainable fishing practices and its professional yet artisanal approach to delivering and processing fresh fish helped attract new business and customers to its brand. Importantly, the community was open and willing to share its stories of successes and pitfalls with local and regional journalists interested in covering community sustainability stories. The free "advertising" and brand building that they received has resulted in a high degree of community pride, support and consumer awareness around their

efforts. This community pride translates into an increased desire and informal competition among fishers to develop and employ more sustainable fishing methods that result in higher quality products.

As a result of its effort to highlight and improve the company's sustainable business methods, MFC now finds itself collaborating with the same environmental advocates that the fisherman once battled to learn how to fish in more sustainable ways. For example, with the Island Institute's financial assistance, the MFC hired a gear researcher at the Gulf of Maine Research Institute to assist in quantifying the conservation benefits of moving to more selective gear and concurrent cost savings achieved through improved fuel efficiency.

MFC's impact is also not limited to environmental sustainability. In addition to helping revitalize the local fishing community through higher prices and a near-guaranteed flow of income for community-based fishers, MFC set up a "Share to Spare" program, in which consumers can purchase a share of the CSF that will be delivered to local food banks. These shares allow fishers to sell additional products to their existing consumer base and to do good for their community. They are available for purchase on MFA's web site which also allows consumers to manage their CSF membership online.

KEY LESSON FROM THIS CASE:
A nonprofit can play a key incubation role to community based businesses by supporting entities through the early stages of development and growth and by supporting sustainable fishing practices with information and scientific partnerships.

Midcoast Fisherman's Cooperative Matures

Far from being the fledgling group of dispirited fishers that first founded it, MFC is now a fully operational business with one full-time business manager and 27 part-time employees. From the outset, the Island Institute's goal for

the MFC was for the organization to be able to operate independently of its support and to be able to qualify for its own funding. MFC recently met that goal when they secured a line of credit from a local bank, to be used to expand the Cooperative's storage facility and for occasional working capital needs. As MFC continues to mature and solidify its business relationships, the Island Institute is reducing its incubation role and involvement.

The success and rapid growth of the for-profit cooperative has also left the original, not-for-profit MFA with diminished capacity, given the lack of time and human resources in the small community. As members put most of their effort into growing the for-profit business, it became difficult to dedicate time to the non-profit. Over the past two years the Island Institute has drawn on grant support to incubate the non-profit MFA as an entity to provide support to 29 small-boat fishers in Maine that have joined Port Clyde as part of a cooperative fishing group, managing a government allocated catch share, called a sector. Created to help the Port Clyde fishers educate the public and policy makers, the MFA is now building internal capacity to fill these needs and provide sector members with the technical assistance necessary to succeed in the current sector based management environment. The Island Institute and the MFA envision a two-year capacity building partnership for this transition.

A Partnership for Success

The third-party role of business incubator, played by the Island Institute, gave the newly-formed cooperative a strong business footing for this growth. It provided critical human resources, legal and financial assistance to the

cooperative while in its formative stages, helping MFC get the expertise to price, market and distribute its products.

The Institute has also played an important role in ensuring the MFC had the information and scientific support to integrate and improve sustainability practices into the business model. For the fishermen, an entity like the Institute that can liaise with other environmental organizations and scientists has proven to be an important partner, helping it achieve the continuous improvements in its gear and practices.

THE FARMERS SCREEN (FARMERS CONSERVATION ALLIANCE)

Supporting Community–led Technology Development and Commercialization.

Courtesy of FCA

In the Pacific Northwest during the 1980's, the Endangered Species Act led to government regulation requiring farmers to install specific types of fish screens into irrigation canals to reduce salmon mortality. Though farmers historically used fish screens to maintain their diversions, the government regulations and limited technology options made the approved screens costly to maintain and impractical for many farmers.

Following a disastrous flood on the Hood River in 1996, during which all irrigation infrastructure washed away, the regional Hood River Farmers Irrigation District (FID), a quasi-government agency launched a research and development program under the visionary leadership of Jerry Bryan. The aim: to find a way to keep fish out of farmers' irrigation canals and reduce the considerable expense of maintaining these devices.

After 10 years under development and testing, FID developed an effective screen that saved farmers time and money, and reduced fish mortality by nearly 100%. FID eventually formed a nonprofit organization, Farmers Conservation Alliance (FCA), to distribute the screen and to direct future profits from the screen's sale to rural communities.

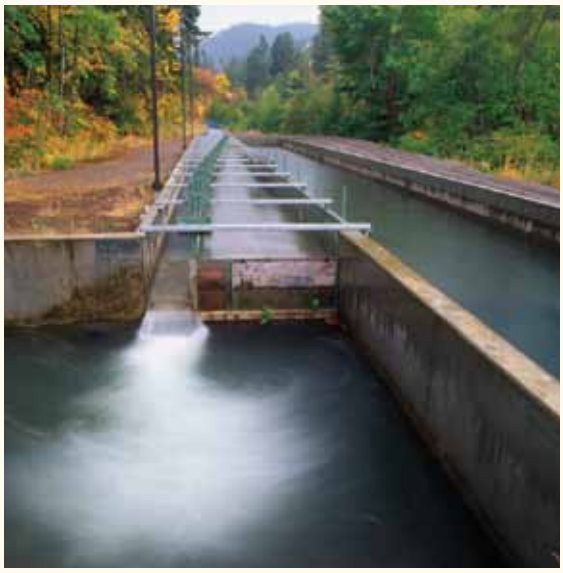
FCA has had to overcome critical barriers to its development, namely a lack of working capital and a need for patient growth capital while it overcame the approval and permitting hurdles for its new technology. It has done this through a complementary combination of grants, program related investments and loan guarantees from private foundations.

History of the Farmers Screen

Fish screens are used to keep fish out of farmers' irrigation intakes. As salmon populations dwindled in the 1980's in the Pacific Northwest, federal legislation to protect fish required that farmers use only government approved screens. Limited technological options meant that farmers usually incurred significant costs by installing and maintaining only government-approved screens which were not suitable for all areas.

In 1996, a massive flood released from Mount Hood destroyed all of the installed screens in the Farmers Irrigation District, and debris from the flood clogged intakes and shut down small hydroelectric facilities in the area. Nearly bankrupt from the devastation, FID stakeholders were prompted to develop their own screen technology that would reduce installation and maintenance costs to farmers as well as prevent fish from entering irrigation intakes.

In collaboration with a range of government, community, tribal and environmental organizations, FID developed and tested a nearly self-cleaning screen that keeps irrigation intakes clear, prevents fish from entering the intakes and significantly reduced farmers' installation and main-



Courtesy of FCA

THE OPPORTUNITY: In response to a crisis, the community developed a new, better type of fish screen to keep debris and fish out of farm irrigation systems. They called it the Farmers Screen.

tenance costs. FID patented the design and set up a non-profit organization, Farmers Conservation Alliance, to commercialize the screen and reinvest future profits back into rural communities.

Financial and Bureaucratic Hurdles to Overcome

Despite having solved the technical problems of fish screens, FCA faced sizeable financial and bureaucratic obstacles to getting its product into the hands of willing farmers.

The cost of screen installation is anywhere from $20,000 to millions of dollars depending on stream flow and site conditions. The government programs were set up to reimburse this after installation, but someone had to make the up-front payment to the manufacturer and installers before that reimbursement was given. Without sizeable cash reserves of its own, FCA was unable to purchase and install Farmers Screens, thus delaying the important technology's widespread adoption and use.

A second obstacle for FCA was having sufficient capital to survive during the growth phase, given the drawn out approval and institutional hurdles of a new technology. FCA had to cover testing expenses and accommodate years of government requests while trying to financially maintain the organization, during a phase in which few units could be sold. Gaining federal approval to use these technologies cost FCA and the FID more than $800,000. They are still awaiting final approval of the Farmers Screen from NOAA, which will allow them to streamline the purchase and installation of future units. In the meantime FCA relies on a case-by-case approval process for each installation,

which again requires considerable upfront investments of time and money.

As well as the hurdles associated with approving the technology, local and federal regulations also complicate the expedient installation of the Farmers Screen. As an environmental technology that manages a precious national commodity, the Farmers Screen requires permits from five or more different agencies before installation. These agencies have conflicting rules, making the permitting process extremely cumbersome and time consuming.

Lastly, the adoption of the Farmers Screen has been further delayed and complicated by a general mistrust between government regulators and farmers. Under the Endangered Species Act, all farmers were required to use the fish screens. Although they wanted and needed screens, dealing with the red tape, agencies and unknown costs made them reluctant to approach regulators voluntarily. They feared that regulators would mandate the installation of technologies that were not well suited to their needs, given that the portfolio of approved screens was limited, and that many were costly and ineffective. This general mistrust between the farmers and government had slowed the uptake of such water- and fish-saving devices.

Photo by Dan Kleinsmith

THE FINANCIAL HURDLES: In order to market its new technology, the newly established FCA needed to overcome cash flow difficulties as well as secure sufficient growth capital to endure the long approval and permitting processes for new technologies.

Solutions for FCA and the Farmer's Screen

In 2008, once they had a patented, tested and working technology, the Hood River FID created FCA to commercialize and mainstream the Farmers Screen as well as to address each of the obstacles that prevent such technologies from widespread adoption. FCA now works closely with land owners and the other parties involved in these

FINANCIAL TOOLS EMPLOYED: A first-loss loan guarantee from the Lemelson Foundation coupled with a PRI from RSF Social Finance provided FCA with the working capital needed.

installations to help co-ordinate the entire process including permitting, installation and reimbursement.

Perhaps most significantly, FCA has made use of creative financing tools to build its cash reserves and enable it to cover the significant up-front costs of technology approval and installation. FCA received a grant from the Lemelson Foundation in 2008 to add two staff members to their team. As the Lemelson Foundation staff worked with FCA on the grant approval, it became clear to them that adding new staff would be only marginally effective in making FCA's program a success. What FCA needed, in addition to human resources, was credit so that they could obtain working capital to cover the costs of implementation between the time a farmer came to them with a request and the time that government reimbursement funds were paid to FCA.

Lemelson did not want to cover the credit gap with grant funding, which would make the government reimbursement funds redundant. They also wanted to help FCA to establish a relationship and credit history with a lender that shared FCA's broader community and environmental goals. With these aims in mind, the Lemelson Foundation introduced FCA to the RSF Social Finance, a nonprofit financial services organization.

Lemelson also agreed to provide RSF Social Finance with a first-loss loan guarantee for a PRI investment that RSF would make to the FCA program. By constructing this three party deal, RSF was encouraged to take a higher level of risk with an unknown partner, and FCA has been able to build a long term relationship with a financial services organization. FCA uses the PRI capital to pay for Farmers

INNOVATION USED TO MEET OBJECTIVE: With the financing gap filled for now, FCA can manufacture and commercialize the Farmers Screen, and can also help landowners finance the purchase of and navigate the permit process for the screens.

Screen installations as well as the related ongoing technology approval costs. Upon reimbursement from federal grants after installation, FCA's coffers are replenished and the enterprise is able to re-use these funds for additional installations until it needs to return the principal to RSF. If repayment is timely and the relationship continues to thrive then, as an existing partner with a good credit history, FCA may be able to apply to RSF in the future for PRI funds for expansion of their program.

Importantly, FCA also plays the key role of trusted intermediary between the farmer installing the screen and the multiple agencies involved in approving the installation. In this capacity, FCA encourages more farmer participation by providing technical assistance to the farmers in the permitting process, and navigating the complicated process of reimbursement in the event that a farmer is using grant funds. Offering support in the approval process helps farmers to get the needed permits, but it also allows FCA to be sure that the project will qualify for reimbursement funds from the appropriate agencies – reducing both financial and implementation risks.

During the demonstration phase, FCA has installed 17 Farmers Screens, which cover 25% of the organization's operating costs. With federal approval expected shortly, full implementation will be able to begin. FCA then expects to install over 250 units through 2017, when revenues should cover over 70% of the organization's operating costs. As trust grows in FCA, farmers are approaching the organization for help in making other environmental improvements by other water and energy technologies.

KEY LESSON FROM THIS CASE:
Technology dissemination and adoption are impeded by a lack of capital as well as institutional barriers around new technology approval.

Relevance to Fisheries Conservation and Other Fields

FCA provides an example of how elegant solutions such as the Farmers Screen can be stifled by a range of financial and bureaucratic barriers so large that widespread adoption and use become unlikely, despite sizeable benefits to farmers and fish populations alike. The case demonstrates that business and market solutions alone cannot always solve social or environmental issues, and that regulatory hurdles and barriers must be addressed as part of strategic initiatives.

Courtesy of FCA

The Lemelson Foundation's foresight and FCA's creative use of alternative financing, combining grant funds, a PRI and a loan guarantee, illustrate that financing the development and adoption of such technologies can be an effective way to achieve conservation goals while empowering organizations to turn an economic challenge into an opportunity. The provision of different forms of capital and assistance in the permitting process helps farmers to overcome knowledge, financial, trust and technical barriers to adoption of the new technology, and provides long-term revenue opportunities for FCA.

Further, FCA's deliberate attempt to serve as a neutral intermediary has built trust and cooperation between farmers and government entities. FCA's neutral role helps farmers acquire new technologies and reduce costs and assists local government regulators to enforce environmental standards that help protect fish populations.

KEY LESSON FROM THIS CASE:
In order for new environmental technologies to be implemented, an independent (non-government, non-profit) intermediary that fishers and farmers trust may be needed for progress to be made.

INDUSTREE CRAFTS LTD AND INDUSTREE CRAFTS FOUNDATION

Scaling a Social Enterprise Using a Hybrid Business/Non–Profit Structure

Courtesy of Industree Crafts Ltd.

Throughout the 1990s Neelam Chhiber worked on government-sponsored projects to enhance artisanal India's National Institute of Design, successfully integrating contemporary design elements into traditional workmanship of rural producers and artisans. While the skill-building efforts of these projects were generally successful, Chhiber found that without development of sales channels to large retail outlets, these projects achieved only small sales volumes - limiting the income of participating rural producers. Without creation of a distribution channel for the products resulting from training programs, rural artisan income would remain below the poverty rate.

In 1994, Chhiber and colleagues Gita Ram and Poonam Bir Kasturi agreed that the best way to improve the lives of rural artisans was to start a for-profit company that could generate and sustain demand for artisans' products through a direct connection with large, urban retailers and distribution channels. Initially they were compelled to make their vision work under an exclusive for-profit structure. Chhiber and her colleagues, with initial financial

backing from Ram, founded Industree Crafts Ltd (ICL), as a stand-alone business venture.

Over the next few years, Chhiber realized that the rural producers that she was employing needed significant training and capacity building in order to maintain and grow their producer groups to keep up with the growing demands for volumes of quality products. Rural artisan producers, far-removed from the urban markets they serve, required technical skills and craft training development, and as emerging small businesses of their own, needed significant small enterprise skills development.

While this training for rural producers was vital to the business model of ICL, the for-profit could not price products competitively and still have adequate margins to cover the additional costs associated with the training functions. Additionally, specialized staff were needed for these functions since rural capacity building was not the core strength of the business employees. To address these issues and to enhance the services that could be provided to rural producers, Chhiber founded Industree Crafts Foundation (ICF) in 2000, an Indian nonprofit organization that could access government grants and consulting contracts (only offered to nonprofit organizations) for skills training and capacity building for rural artisans.

OBJECTIVE: The founders of Industree Crafts Ltd. wanted to provide livelihoods for low income rural communities by training local producer groups to create high quality products. Their chosen niche is products requiring high variable costs (i.e. wages) and low fixed costs (i.e. capital expenditures for machinery).

THE STRATEGY: To meet the objective of helping community members, Industree Crafts Ltd. needed to be a financially sustainable and scalable venture, distributing products at competitive prices and volumes through existing retail supply chains.

Industree's Hybrid Organization

ICL and ICF quickly began to operate alongside each other and carry out distinct, complementary roles. ICL, the for-profit enterprise, focuses on building distribution channels. The nonprofit ICF maintains close links with the business enterprise for design input and purchasing contracts but

relies on government grants and consulting contracts to fund their skills training, livelihood development and capacity building work with rural artisan groups.

ICL's formation of a partner nonprofit removed a number of obstacles to the company's scaling and success as a social enterprise. First, the for-profit company was relieved of the financial and human resource burden of basic capacity building for the rural producer groups that manufactured the company's products. Newly liberated profits and dividends could now be reinvested into growth of for-profit business functions such as improving product design, growing markets and developing distribution channels.

The hybrid also benefited the Indian Government by establishing a productive non-profit consulting partner for its rural production programs. Industree Crafts Foundation not only provided effective skills and livelihood development programs for rural artisans, but also included a direct link to the market for artisans' products through ICL. This factor was particularly important to government programs that had long lacked a direct connection between rural producers and urban markets, and had therefore failed to scale rural businesses and income levels for the small community based producers.

INNOVATION USED TO MEET OBJECTIVE: Chhiber set up a hybrid business/nonprofit structure, to take advantage of the efficiencies and financing opportunities offered by each.

Close Ties and Complementary Roles

While the original impetus to create the nonprofit organization was simply to access government funding for capacity building of rural producer groups, Industree's hybrid structure has been crucial to the growth of both ICL and ICF and helps separate the distinct but complementary functions between the two entities.

ICF and ICL Methodology and Structure

ICF helps individual artisans organize into self-governed producer groups called Self Help Groups (SHGs). SHGs receive the technical assistance and small enterprise training and ultimately behave as small producer associations that trade directly with ICL (and other vendors). SHGs receive training and guidance on product quality, as well production and delivery schedules.

ICL also helps rural producer groups gain business acumen through favorable but commercially minded financial assistance. In some cases, Industree Crafts provides microloans or loan guarantees to SHGs to help get them started. By providing these groups with direct financing or guarantees, ICL helps remove a credit barrier and also gives the groups the confidence and experience they need to later apply for and take on commercial debt.

In order to take the shared profit and financing philosophy of ICL further and in order to create a partially artisan-owned enterprise, ICLs founding partners recently set aside a portion of their own ICL equity for rural producer groups to buy shares "at par" at the appropriate stage in the group's own development.

Industree Crafts Ltd. Focuses on its Mission

ICL also needed working capital of its own initially. Founding partner and advisor Gita Ram provided start-up funds in cash to ICL in 1994, which were combined with below-market debt financing from a third-party individual investor. Between these two sources of capital, and the founding partners' deep experience, technical skills and vision,

FINANCIAL TOOLS EMPLOYED:

Industree was started up using multiple sources of funding including:

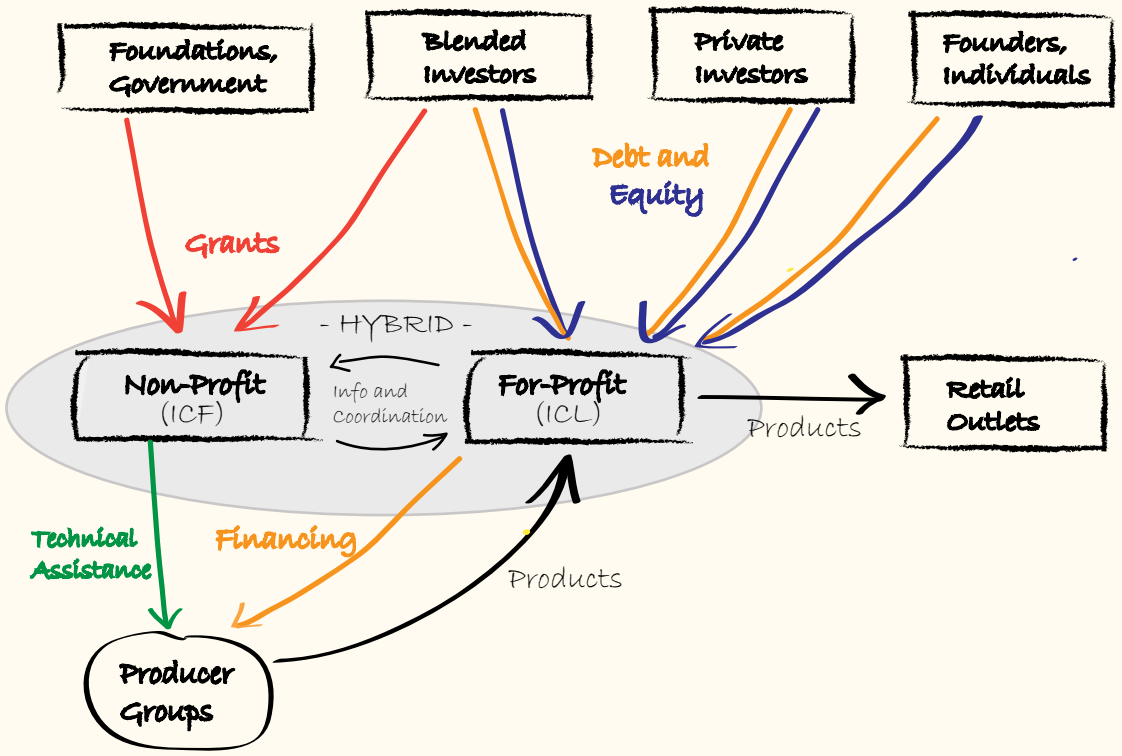
- Sweat equity, commercial debt and venture capital equity for growth capital to develop and scale the for-profit business.
- Grants/consulting contracts from government and international institutions to cover capacity building costs of the non-profit.
- Supplier financing (lending, guarantees, lease-to-own and equity) between the business and the non-profit.

ICL was able to grow slowly and steadily, even though although the operational and financial costs of training rural artisans initially dragged on Industree Crafts' profitability.

Through the creation of the nonprofit ICF, the for-profit Industree Crafts could remain focused on its core business principles of designing and branding its products, sourcing production and identifying distribution channels. By relieving the business of the expenses related to rural capacity building and training, ICL's profits could be re-invested to further build the business, without trading off its social mission and desired impact.

The social component of Industree Craft's products is an added benefit to distributors, but not the deciding factor in procurement. Many of Industree Crafts' distributors preferentially contract with the company because Industree provides innovative designs and high product quality. Industree also works hard to maintain competitive prices and volumes in order to remain attractive to large-scale, and in some cases international buyers.

Industree Crafts aims to preferentially source all of its products from small-scale, rural producers as long as sufficient supply volumes of quality products are available from these groups. However, limited capacity and experience among these groups occasionally leads to supply disruptions or shortages. In these cases, Industree Crafts fills contracts by purchasing other products from different sources in order to honor its agreements and relationships with distributors and maintain its business ethos. The distribution contracts signed by Industree are not exclusive to supply offered by rural producer groups.



Financing the Scaling Up of Industree Crafts Ltd.

While Industree's hybrid entities were performing well and complementing each other's roles, by 2006 Industree had reached a point where it needed to grow if it were to have the type and scale of social impact that Chhiber envisioned for rural producers. Amidst their considerations on how to scale Industree, Chhiber and Ram commissioned a social audit report on the company's activities to determine what types of impact were being created among producer communities and at what magnitude. The results of the social valuation of Industree's activities revealed that the company was indeed increasing rural incomes in some areas and making a difference among producer communities, but that rural poverty persisted.

Chhiber and Ram realized that to increase rural artisan income and lift producers out of poverty permanently, Industree needed to develop larger, sustained market demand for its products. To scale its operation, Industree needed to build its brand and grow the domestic market through expanded product lines. For this, ICL needed to seek out training and technical assistance of its own.

In 2007, Chhiber enrolled in Social-Impact International (now Dasra Social Impact), a professional development program for social entrepreneurs based in Hyderabad. Social-Impact helped Chhiber develop Industree's business plan for scaling up, opened doors to new financing opportunities and, perhaps most significantly, helped fortify her conviction that her vision for the hybrid ICL/ICF venture was indeed viable.

Armed with a business plan, compelling results from its social valuation report and the determination to raise investment capital to scale its business and its social impact, Industree eventually secured Indian retail giant Future Group as its first commercial investor. Future Group wanted to tap into the growing domestic market for "green" or socially conscious products, and after reviewing Industree's social valuation report alongside the company's financial figures, Future Group increased its valuation of Industree and invested $US 1.5 million for a 43% stake in Industree's for-profit company.

Since that original investment, Industree has also attracted $US 500,000 in debt financing from Oikos Credit, a firm specializing in debt and equity financing for social enterprises. And more recently, the World Bank's Grassroots Business Fund (GBF) made an equity investment

into Industree Crafts alongside a grant to Industree Crafts Foundation, encouraging both entities to scale up in sync with one another.

Industree as an Example for Sustainable Fisheries Enterprises

The Industree example provides an example of how community-based sustainable fisheries may be supported to compete in larger distribution and supply chains. In many cases, fishers work independently in disaggregated, small-scale operations with little or no direct access to larger markets for their seafood harvests. Most sell their products to distributors who do not offer them training to improve product quality or to develop value added products. These distributors typically also do not help to build a brand for higher quality sustainable products or offer advice on which innovations in gear might yield a more desirable product.

With low margins and no direct access to high volume retailers, most small-scale producers cannot save enough to invest in growing their businesses, or to build any collateral needed to qualify for commercial debt. Incomes in these fishing communities remain low and there is little long term equity upside in any part of their businesses.

In these cases, a nonprofit entity might secure grant support to provide training and capacity building to fishers so that they may consolidate, improve, and aggregate their operations. This non-profit might be able to negotiate a relationship with a socially or environmentally conscious for-profit processor or distributor to work as Industree Crafts does; to develop a brand for sustainable fishing products, and to negotiate contracts with retailers or large scale

KEY LESSON FROM THIS CASE:
Developing a hybrid structure can be a powerful model when addressing the challenge of scaling up socially and environmentally responsible small-scale production.

Hybrids allow financing to be channeled to the project from a larger array of investors and also allow the for-profit and nonprofit sides to each remain sharply focused on their different, but complementary, roles during the scale up.

distributors for products which are preferentially sourced from sustainable community based fishers. Eventually, the for-profit and non-profit could improve practices and offer profits that can be reinvested by fishers to grow sustainable supply to a level that allows 100% of the contracts to be filled by sustainable, community owned harvesting or processing groups.

E+CO

Large–Scale Incubation, Using an Integrated Capital & Technical Services Package.

Courtesy of E+Co

E+Co began investing in clean energy businesses in developing countries in 1994. The objective was to provide energy access to populations that lacked it. This was something governments, development agencies, and NGOs had been trying to do unsuccessfully for decades, littering the landscape with failed energy programs. However E+Co's approach was different: it proposed to use a business-based model to do this, a novel concept in the early 1990s. The idea was to identify entrepreneurs that could create energy businesses that reduce poverty and greenhouse gases; businesses which had the potential to be financially profitable and grow if given the right start-up support.

This was, by any measure, a challenge: the promotion of small scale businesses in developing countries is difficult enough in the best of circumstances. Compounding this, E+Co was seeking entrepreneurs to target services to some of the poorest segments of the local populations, often in remote rural locations served by extremely limited physical and financial infrastructure... and expecting them to make a profit doing so.

Yet despite these overwhelming odds, E+Co has been highly successful. In the last 16 years it has grown to manage a portfolio of over 260 investments, totaling $40 million dollars in over 20 countries in Latin America, Africa and Asia. Operating out of 6 regional offices, E+Co has in effect succeeded in establishing a global incubation network that identifies, supports and helps launch local clean energy businesses. These companies are not only profitable to their owners, but have, to date, brought clean energy to over 6 million people, created over 5,000 jobs, and offset 4.6 million tons of carbon, a remarkable achievement in some of the most hard-to-reach and finance markets in the world.

OBJECTIVE: E+Co set out to find entrepreneurs who build profitable clean energy businesses in rural areas of developing countries.

The E+ Co Methodology and Structure

E+Co has been well supported from a diversity of investors who enable these impacts. These include government aid agencies, private foundations, social-investors, multilateral banks, and UN agencies that all share objectives which overlap with E+Co's goals. The majority of support is provided to E+Co in the form of long-term debt (PRIs), under favorable terms and low interest rates and intended for infusion into the portfolio businesses. Some grants make up the balance of E+Co's income, helping it to pay its operating costs and cover fees for the technical assistance provided by its local investment teams. The investors expect a "blended return" - in addition to getting their loan principle back with interest, they are seeking social impacts (poverty reduction, health improvements, livelihood creation) or contributions to improving the local and global environment. The mission alignment of the investors with E+Co, as well as the flexible funding terms are therefore both important ingredients.

However, the true secret of E+Co's success is its business incubation model. From the outset, this model has been based on providing an integrated package of capital and technical assistance, simultaneously, from within a single organization. This two-pronged support is what distinguishes E+Co from others in the field. It is the key to being able to help the companies get off the ground, and is what the successful businesses themselves later identify as the critical element in turning around their development.

When E+Co establishes new relationships with clean energy entrepreneurs, the entrepreneur is typically stuck in the gap known as the "missing middle" - too large to access microfinance, and too small to get traditional commercial lending. They are therefore seeking capital. From the beginning, however, E+Co's investment teams explicitly engage them on a dual front - offering to fill both the capital shortfall together with specific, customized technical & business training, which E+Co calls Enterprise Development Services (EDS). These services are matched specifically to the stage of capital investment, and can include customized training, advisory and other support services. The goal is to enable entrepreneurs to not only finance the start up of the venture, but at the same time build strong business foundations and 'bankable' business propositions to later qualify for commercial investments.

Starting out small, E+Co takes a "serial investment" approach, providing increasing amounts of capital and services over time to match the success and growth of the enterprise. At every step of E+Co's investment, the E+Co investment team providing EDS ensures the entrepreneurs have the knowledge and business skills to grow their company

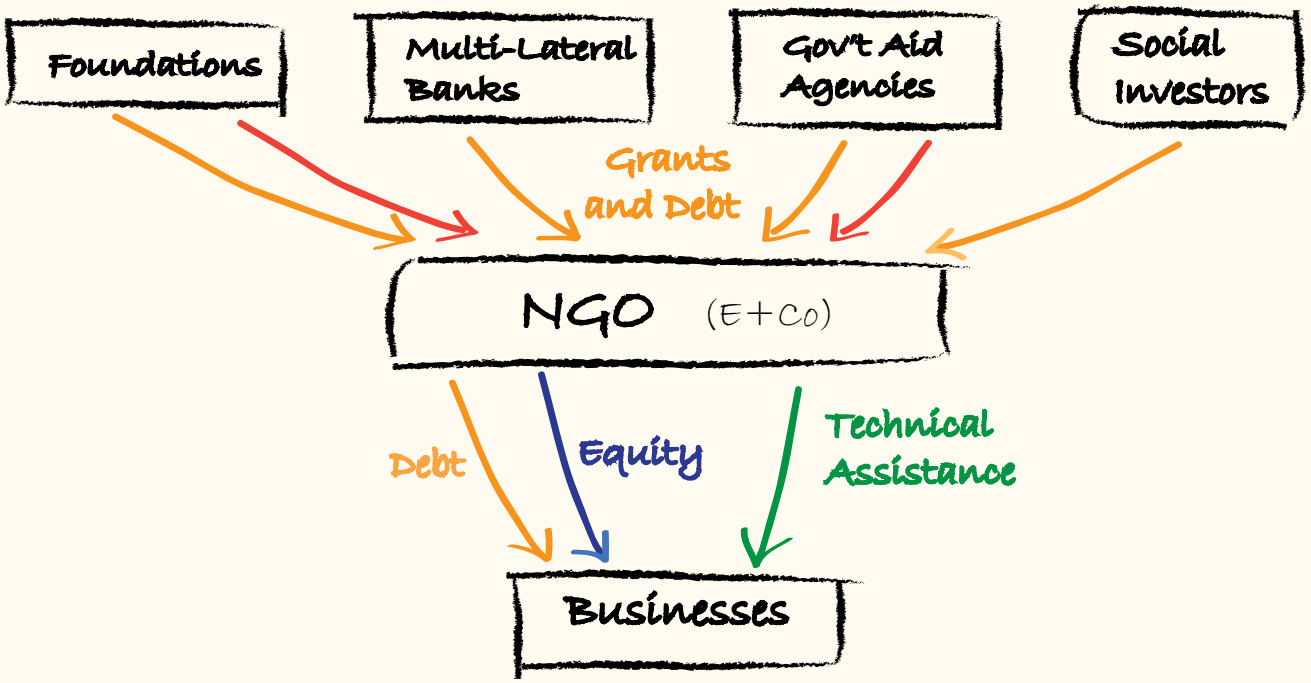
KEY LESSON FROM THIS CASE:
Providing a joint package of capital and technical assistance under a single organizational umbrella helps manage risks and incubate small businesses in even the most challenging contexts.

to the next level, and then works with them to get the capital they need. Around 80% of E+Co's total portfolio is "venture debt," loans given with favorable long terms, flexibility and grace periods. The remainder of the portfolio are direct equity investments in the companies, made mostly in Asian countries where loans are readily available from other sources, or where outside entities are prohibited from debt investments. With growth and successive investments, E+Co adjusts its financial terms and fees to converge with standard private capital requirements, preparing the company for outside investment. This evolution also helps offset the early, more heavily subsidized period of support.

Providing a Joint Package of Capital and Technical Support is Critical

The joint package of capital and service drives the success of this incubation in many ways. Without the investment teams providing EDS, the investment risk in these early-stage, under-collateralized entrepreneurs would be too high; the main reason they cannot get capital from conventional sources. With EDS, however, that risk is reduced at every stage of growth, as E+Co's officers on the ground, playing the role of banker, mentor and trainer, are fully aware of the capabilities of the business and its readiness for capital. At the same time, building the enterprise's knowledge and skills alongside its balance sheet prepares it for the next stage when, with a proven business plan, collateral, and financial history, the company can go out and access private capital for further scaling. E+Co has learned that going easy on its enterprises in the early days does them a disservice for this latter phase. They now

makes sure no corners are ever cut regarding formalizing loan agreements, registering collateral, etc.



The business model is clearly on the right track. Of the 268 projects, 52 have been written off, but at early enough stages that they represent less than 10% of the value of the $40 million portfolio. To date, the weighted internal rate of return (IRR) of the debt part of the portfolio is over 8%. The equity portion of the portfolio - although still small - is also showing a promising record. Its overall IRR is close to 11%, based on the market values of the investments. Of its 31 equity investments, E+Co has exited from 5 successful, returning a healthy 16% rate of return.

E+Co acknowledges that these returns do not include the EDS costs, which are typically grant-supported. Regard-

less, in these developing country contexts where other business incubation attempts are often black holes of grant funding, E+Co's performance stands apart. In fact, its large scale incubation model has proven so successful that it is now working with funders and partners on attempts to scale its impact even further, as well as transfer it to other sectors.

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Relevance for the Fisheries Conservation Sector

For the fisheries sector, E+Co should serve as an inspiration that it is possible to incubate and grow small, environmentally sustainable businesses even in the most challenging of environments. As many of the other cases throughout this report highlight, many "could-be-sustainable" fishery businesses around the globe are also caught in the "missing middle", and could benefit from the provision of technical assistance and Enterprise Development Services (EDS) as well as financing from a single coordinated investment entity with expertise in the sector.

III. CREATING AND EVALUATING NEW PROJECTS FOR FINANCING

The case studies in the previous section highlight the diversity of financial structures that have been or could be used to meet the challenges in the fisheries sector. They also demonstrate the value added by layering and combining different forms of capital and types of investor interests, timelines and exit strategies.

Entrepreneurs creating new projects need to decide which structure to put in place for their own particular needs and context. While it would be convenient to have a decision tree or other template indicating which approach to undertake under what conditions, the reality is that a no such prescriptive guide is realistic, given the multitude of contexts and relevant issues that must be considered, as well as the fact that personal relationships of the project leaders can open windows to finance and technical assistance that may not be possible for others to replicate.

However, some general guidance can be helpful, especially in relation to the sequencing of project considerations around financing structures. In the following section, we provide some basic guidance on the project development process for fisheries financing projects and on ways in which foundations and private philanthropists might consider helping project leaders in this sector to break down barriers to commercial financing acquisition.

THE BASIC PROCESS OF DEVELOPING VIABLE FINANCIAL STRUCTURES:

A GENERAL SUMMARY FOR PROJECT DEVELOPERS

1. Obtain a good understanding of the legal and market landscape, problems and potential cash flows, or reasons for existing gaps in commercial financing. Not all fisheries are alike and each species and geography may reflect different regulatory and economic opportunities and challenges.
2. Consider how carrying out the project will best support conservation and study the examples of projects (starting with the case studies herein) to learn what financial tools and structures have been successfully used to meet those conservation objectives.
3. Create a simple business model incorporating the financing tools that are expected to be used, to ensure that cash flows from revenues can support debt or equity obligations, at what rates, and in which timeframes. Be sure that a viable exit strategy is part of this model.
4. Engage potential partners in discussions - adapting the model as needed to meet different organizational objectives - but always ensuring that revenues can support debt and equity at the rates and in the time frames that potential partners are requesting. Be sure to test the volatility of revenues to changes to market conditions, interest rates, and exit timeframes to understand where you can and cannot be flexible in negotiating terms with partners.
5. Draw a diagram (such as those shown in this report) to demonstrate how cash flows through the system and how partners are related to one another. Be sure that all partners are in agreement with the proposed structure.
6. Consider asking philanthropists for grants structured specifically to facilitate the acquisition of commercial debt or equity (see the Summary of Financial Tools at the end of this section). This can build the business elements of the project and demonstrate financial viability to social investors or commercial investors. It may also help to both scale the project and to make the experience replicable for others.
7. Consider bringing in commercial investment partners, early in the project struc-

turing process, to add business expertise and scrutiny to the project. Encourage structures that allow beneficiaries to build credit histories and relationships with commercial capital providers.

8. Throughout the process, be sure to keep a central focus on the conservation mission, as well as on the financial goals, weighing trade-offs carefully. The conservation elements of the project are likely to be the competitive advantage of the businesses being built in the long term.

9. Revisit the lessons learned in this report, and check hypotheses and business models with relevant project leaders and other experts to fine tune the project accordingly.

The table below lists the case studies presented earlier together with the types of capital employed in each, as a reference for new project leaders and foundation staff.

TYPES OF CAPITAL USED IN CASE STUDIES

	PHILANTHROPY			GOVERNMENT		COMMERCIAL	
	GRANT	DEBT	MRI	GRANT	DEBT	DEBT	EQUITY
1. ASSURING CONSERVATION THROUGH OWNERSHIP							
TNC's Morro Bay Buyout	√						
The Sea Change Investment Fund	√	√					√
Beartooth Capital Partners	√			√			√
2. PROMOTING CONSERVATION THROUGH TARGETED LENDING							
Cape Cod Fisheries Trust	√	√			√	√	√
Verde Ventures & Mexican Lobsters	√	√					
North Pacific Fisheries Trust		√					
MacArthur Foundation	√	√					
3: ENABLING CONSERVATION BY COMBINING SERVICES & CAPITAL							
Maine's Island Institute	√					√	
The Farmers Screen	√	√		√ (as rebate)			
Industree Craft of Indiaw	√	√		√		√	√
E+Co	√	√			√		

CHECKLIST OF "PROJECT READINESS" BASED ON LESSONS FROM THE CASES

Critical Conservation Elements

1. ☐ **Clear conservation objectives and expected impacts have been defined and agreed upon by all parties.** Some projects incorporate a financial element to complement conservation work that is on-going. In these cases, the specific links between the financial outcomes and conservation outcomes should be well defined. Other projects use finance as a means to support conservation oriented businesses (such as SCIF, E+Co and Beartooth Capital). In these cases, the specific conservation outcomes expected should be defined and financing decisions should include a conservation screening and prioritization process.

2. ☐ **Communications protocols and metrics around conservation outcomes have been established.** As a project evolves from the conceptual to the implementation phase, attention to the conservation objectives can often be lost. Many project leaders lose their conservation focus when faced with decisions where conservation and financial gains are at odds with one another. It is critical that funders and their recipients establish good and regular communications processes up front to ensure that conservation and financial objectives are weighed rationally throughout the project.

3. ☐ **Tools have been developed and will be employed to lock in conservation-oriented behavior beyond the deal's exit timeframe.** The tools foundations can use to tie investment to conservation outcomes can include "Conservation Covenants" that are agreed between lenders and loan recipients, or "Conservation Terms of Investment" such as those used in the case of the Sea Change Investment Fund. Investors and recipients should discuss how to ensure these requirements are followed after the conservation-oriented investor exits from the project, to be sure the change is more than temporary compliance.

4. ☐ **The replicability and scalability of the project have been considered in its structure - and can be replicated by others to improve conservation impacts.** For conservation impacts to be significant on a regional or global scale, the impact of most projects or companies have to be replicated or scaled significantly. It is helpful to keep this in mind in the development of the right finan-

cial structure, to ensure that the achievements of a particular investment are capable of being adapted or duplicated by others, or scaled without relying on a single type of investor for long term financing.

5. ☐ **Grants, debt, and equity investments have been structured to separate the impact elements that are non-revenue generating, from business elements - allowing the projects to request the right type of financing for each.** Coupling grant money with debt and equity is often not only a powerful form of leverage, but also highly appropriate, where the investments include an element of "public good." If one can clearly identify that "public good" element, and separate it from activities where private value can be made and captured by businesses, the "whole" (in terms of potential impact) can be greater than the sum of the parts. In this regard, hybrid business/non-profit structures should be looked at to enable that separation.

Critical Financial Elements

6. ☐ **The project has clear and sufficient financial returns to repay investors.** The venture must have potential to generate profits or savings from efficiency if debt or equity is to be viable. If no such revenues or savings are apparent, repackaging the project with other related activities or modifying the business model to incorporate activities that generate revenue or savings component can help open it up to potential debt or equity financing.

7. ☐ **Project leaders have identified financial risks and appropriate mitigation measures.** Clarity on the nature and size of the financial risks is key. One needs to lay out the external market risks (e.g. change of quota share prices), as well as other demand risks that may influence the actual deal flow.

8. ☐ **The project anticipates and will seek funding from a diverse array of investors.** Diversity of types of funding provides great value to the project and its investors. For the recipient, it allows greater flexibility to adapt to changing external circumstances. For the investors, diverse funding generally reduces the risk of investment and also brings a diversity of contacts and technical expertise to the project.

9. ☐ **Debt and equity ratios seem to be appropriate for the venture.** The appropriate ratios of debt to equity depends on the stage of project, the revenue char-

acteristics, and the exit strategy. Generally speaking extra caution needs to be taken to avoid the temptation to offer excessive levels of debt to organizations, without commensurate equity or grant based support.

10. ☐ **The terms requested by investors seem reasonable.** Terms of funding are as important as the amounts of capital invested. Critical terms of funding include interest rate, repayment time frames, exit timeframes, restrictions on adding new investment partners, and the amount of flexibility allowed to make adjustments over time to these terms.

11. ☐ **Consideration has been given to providing indirect support to the project in the form of loan guarantees or technical assistance as a way to leverage commercial funds and build long term relationships with new financing organizations.** There are many cases in which providing a loan guarantee rather than the loan funds themselves may lead to better impact and project scalability. A loan guarantee which backs commercial debt can not only provide greater leverage of a foundation' s funds, but it also helps recipients of the debt build a relationship with banks or other investors for future use.

Critical Structural Elements

12. ☐ **A capacity building and technical assistance component is included in the structure.** Few organizations can be injected with capital without a parallel effort to raise the organizational capacity to manage that capital. Many of the cases discussed in this report highlight how critical technical assistance or services have been as complements to capital. A plan for technical assistance, as closely coordinated as possible with capital injections, will reduce the financial risks and increase the likelihood of long term success of most ventures.

13. ☐ **A learning phase with staged investments to match growth and development over time has been structured into the project.** When a project is a first for an organization in terms of either the types of financing sought, the geography of the project or the type of work (fisheries or other), then a learning phase should be incorporated into the structure. This is also needed if questions exist about market dynamics related to a new venture, the true demand for a product or service being offered, or if specific management and leadership teams have not yet been identified for a project.

14. ☐ **A clear exit strategy has been developed.** A plan for an exit strategy focuses attention on many key elements of success, as it influences the types of capital options that are available (e.g. equity), as well as the timing around the needs and availability of that capital. When multiple investors and financing instruments are involved, each will have differing requirements and expectations on what the exit strategy looks like, and how it is affected by changes in market conditions, business performance etc. Agreeing on the exit plan up front is therefore critical.

15. ☐ **The organization has built sufficient trust & presence with the stakeholders they wish to engage, to carry out work plans.** Establishing trust, especially when bringing together diverse groups such as private-funders , non-profits and government entities is a core need if any project. A dedicated presence on the ground and familiarity with the local context and issues can be the key to unlocking collaboration between community members and larger organizations, as the work in Morro Bay has demonstrated.

16. ☐ **The non-financial benefits of different investors have been weighed and are being fully utilized.** Investors need to be approached as more than just sources of capital. Through their experience with other projects and sectors, as well as contacts, they can become a great source of strength and value to the project that goes well beyond their financial contribution. Seeking the right sources of capital and partners should therefore be approached as an opportunity to add value to the project by bringing in a complementary set of experience as well as funding.

17. ☐ **Philanthropic investments (grants and/or PRIs) are being used to leverage and incentivize participation by different types of investors types.** Foundations should attempt to understand the nature of the barriers or risks that might keep commercial or other investors from participating in a project - and structure the use of their funds, technical expertise and branding to best leverage additional investor participation either at the outset of a project or at a later stage, allowing the project to scale and philanthropists to exit over time.

SUMMARY CHECKLIST OF CRITICAL ELEMENTS FOR PROJECT "READINESS"

FINANCIAL

- ☐ Clear conservation objectives and expected impacts have been defined and agreed upon by all parties.
- ☐ Communications protocols and metrics around conservation outcomes have been established.
- ☐ Tools have been developed and will be employed to lock in conservation-oriented behavior beyond the deal's exit timeframe.
- ☐ The replicability and scalability of the project have been considered in its structure - and can be replicated by others to improve conservation impacts.
- ☐ Grants, debt, and equity investments have been structured to separate the impact elements that are non-revenue generating, from business elements - allowing the projects to request the right type of financing for each.

CONSERVATION

- ☐ The project has clear and sufficient financial returns to repay investors, even if some price or demand vary over time.
- ☐ Project leaders have identified financial risks and appropriate mitigation measures.
- ☐ The project anticipates and will seek funding from a diverse array of investors.
- ☐ Debt and equity ratios seem to be appropriate for the venture.
- ☐ The terms requested by all investors seem reasonable
- ☐ Consideration has been given to providing indirect support to the project in the form of loan guarantees or technical assistance as a way to leverage commercial funds and build long term relationships with new financing organizations.

STRUCTURAL

- ☐ A capacity building and technical assistance component is included in the structure.
- ☐ A learning phase with staged investments to match growth and development over time has been structured into the project.
- ☐ A clear exit strategy has been developed.
- ☐ The organization has built sufficient trust & presence with the stakeholders they wish to engage, to carry out work plans.
- ☐ The non-financial benefits of different investors have been weighed and are being fully utilized.
- ☐ Philanthropic investments (grants and/or PRIs) are being used to leverage and incentivize participation by different types of investors types.

SUMMARY OF FINANCIAL TOOLS AVAILABLE TO FOUNDATIONS

Grant-Based Tools

The following lists some of the main grant and debt based financial tools available to foundations to leverage their capital and to incentivize the participation of other investors. Definitions of these tools can be found in the explanations and definitions provided at the beginning of this report.

Grant-Based Financing Tools:

When considering supporting a project with a grant, foundations should explore structuring the grant into the following forms or for the following purposes to support external financing partnerships. This list is non-exhaustive and meant to spur the generation of new structures that can be employed by grantmakers in the fisheries arena.

1. Grants to cover one-time (non recurring) start up costs of a new enterprise.
2. Technical Assistance Grants
3. Loan Guarantees
4. Interest Rate Buy Downs
5. Grants for Asset Purchase
6. Revolving Loan Fund Grants

Debt (Pri)-Based Financing Tools:

When considering supporting a project with a PRI or other debt, foundations should explore structuring the debt into the following forms or for the following purposes. As above, this list is non-exhaustive.

1. Deferred interest debt to cover one-time (non recurring) start up costs of a new enterprise.
2. Debt to cover the costs of Technical Assistance
3. Debt provided at low rates to cover Loan Guarantees
4. Low interest debt to cover Interest Rate Buy Downs

5. Debt for Equipment or Inventory purchase
6. Debt to set up Re-Lending programs.
7. Debt to support bridge financing.
8. Debt to support working capital costs.
9. Debt to support equity purchases or equity based funds.

CONCLUDING COMMENTS

Though there are many strong examples of organizations who have effectively found ways to support and scale fisheries conservation through innovative financing, the field is still relatively nascent.

We hope that this guide and the case studies herein will serve both as inspiration and guidance for new innovations in fisheries projects to be financed by investors of all types. Though new projects should be expected to face their own challenges and opportunities, by seeking advice from those who have already developed projects, sharing successes and failures openly to facilitate the work of others, and learning both from the lessons presented here and the hundreds of lessons that we did not have the space to cover, we hope that the field can be moved forward more quickly and efficiently to create sustainable fisheries which will be profitable and abundant for years to come.

DEFINITIONS OF REFERENCED INVESTMENT TOOLS

Angel Investor: (also known as a business angel or informal investor) is an affluent individual who provides capital for a business start-up, usually in exchange for convertible debt or ownership equity. A small but increasing number of angel investors organize themselves into angel groups or angel networks to share research and pool their investment capital.

Bridge Financing: A short-term loan pending the arrangement of longer-term (e.g. commercial) financing. The loan is typically repaid in a lump sum and is most effective when coupled with technical assistance aimed at building long term financing partnerships.

CDFI (Community Development Financial Institution): CDFIs include: Community Development Banks, Community Development Credit Unions, Community Development Loan Funds, Community Development Venture Capital Funds, and Microenterprise Loan Funds. The primary mission of CDFIs is to promote economic development in struggling areas, both urban and rural, that are underserved by traditional financial institutions.

Debt: An amount owed to a person or organization for funds borrowed. Debt can be represented by a loan note, bond, mortgage or other form stating repayment terms and, if applicable, interest requirements. These different forms all imply intent to pay back an amount owed by a specific date, which is set forth in the repayment terms.

Direct Lending (to organization): A PRI loan to an NGO project showing revenue generating potential, often aimed at improving the financial self sufficiency of an organization.

EDS - Enterprise Development Services: any non-financial service provided a business enterprise on a formal or informal basis. This can include: Training and Technical Assistance, Access to Markets, Technology and Product Development, Infrastructure, Policy. Services aim to fill market gaps, enabling entrepreneurs to gain the skills and knowledge to create business plans worthy of the financing needed by the business to grow.

Equipment Loans: Loans for gear change or other equipment to improve business efficiency or profit. Can be used to motivate initial change in an industry so that loan recipients can demonstrate the added value of change to others.

Equity: Ownership interest in a corporation in the form of common stock or preferred stock.

Fishery Quota Share: Quota shares are a property right that represents the quota owner's share of a fishery. Owning quota does not, in and of itself, give one the right to take fish but only provides the right to extract the percentage of the Total Allowable Catch set by the fishery's managers, under the regulations in place for that fishery.

Grants for asset purchase: Funds used by a non-profit to establish an endowment or to purchase core assets (e.g. fishing quota) with no requirement for exit or eventual reversion of those assets to the foundation.

Interest Rate Buy Downs: A prepayment (grant or other type of investment) given to reduce the interest a commercial bank will charge a borrower. The buy-down can be a regular or one-time payment made to the lender. For example, if a bank offers fishers a loan at 8% interest, grants may be used to prepay 3% of the interest due, bringing the effective rate to the borrower down to 5%.

Loan Guarantees: A guarantee by a foundation, individual or other third party to pay a bank or other commercial lender in the case of default by the loan beneficiaries. The guarantee is intended to reduce the risk to an acceptable lender for a lender. Terms of each guarantee are negotiated and may last for the entire life of a commercial loan or for only a portion of that time.

MRI (Mission Related Investment): Financial investment made with the intention of furthering a foundation's strategic goals, and advancing the principal invested or earning a financial return. The expected returns from a MRI may be risk-adjusted market-rate or below-market-rate. MRIs are made out of the corpus of a foundation (i.e. they are not made out of the 5% that must be distributed annually under IRS regulations).

New Market Tax Credit (NMTC): The New Markets Tax Credit (NMTC) Program permits taxpayers to receive a credit against Federal income taxes for making quali-

fied equity investments in designated Community Development Entities (CDEs). Substantially all of the qualified equity investment must in turn be used by the CDE to provide investments in low-income communities. The credit provided to the investor totals 39 percent of the cost of the investment and is claimed over a seven-year credit allowance period.

PRI (Program Related Investments): PRIs are awarded to charitable organizations or commercial ventures providing charitable goods or services. PRIs employ financing methods such as loans, loan guarantees, lines of credit, linked deposits, or equity investments. Under IRS rules, private foundations are allowed to make 'program-related investments' if the primary purpose of the investment is to advance the foundation's charitable objectives, and if neither the production of income nor appreciation of property is the primary purpose. PRI funds cannot be used directly or indirectly to lobby or for political purposes.

Rebate: An amount paid by way of reduction, return, or refund on what has already been paid or contributed. Government programs sometimes offer rebates for businesses and individuals who have made certain investments in equipment or technology. Rebates are provided only after purchase and do not lower the direct costs of purchase at the time of sale.

Re-lending programs: A loan made to an entity (e.g. NGO, CDFI), that then re-lends the funds to specific beneficiaries, leveraging expertise, local contacts. Administrative costs are generally covered by the interest rate spread between the rate charged by the foundation and the re-lending organization. Care must be taken by both foundations and re-lenders to ensure that small enterprises do not get over-extended on debt.

Revolving Loan Fund (RLF) grants: A grant provided to an entity (e.g. NGO), to establish a fund from which smaller loans can be given to beneficiaries. The intent is generally to create a self-replenishing pool of money, which uses interest and principal payments from the first round of loans to issue new ones, hopefully in perpetuity.

Sweat Equity: The contribution made to a project by people who contribute their time and effort. It can be contrasted with financial equity which is the money contributed towards the project. It is used to refer to a form of compensation by businesses to their owners or employees. The term is sometimes used in partnership agreements

where one or more of the partners contributes no financial capital. In the case of a startup company, employees might, upon incorporation, receive stock or stock options in return for working for below-market salaries (or in some cases no salary at all).

Tax Equity Investor: Tax equity financing is financing structure (used most commonly in the renewable energy field) that permits investors to efficiently and economically utilize federal tax benefits generated by the investment.

Technical Assistance (T/A) Grants: Grants to entities that provide T/A to projects. Examples include grants to assist with financial planning and scenario analysis needed before taking on debt.

WEBSITES OF PARTICIPATING ORGANIZATIONS

Manta Consulting Inc. ..... www.mantaconsultinginc.com

The Nature Conservancy:
California Central Coast Groundfish Project ..... www.nature.org

Sea Change Investment Fund ..... www.seachangemanagement.com

Beartooth Capital ..... www.beartoothcap.com

The Cape Cod Fisheries Trust ..... www.ccchfa.org/trust

Verde Ventures ..... www.conservation.org/sites/verdeventures

The North Pacific Fisheries Trust ..... www.ecotrust.org

John D. and Catherine T. MacArthur
Foundation ..... www.macfound.org

Island Institute ..... www.islandinstitute.org

Farmers Conservation Alliance ..... www.fcasolutions.org

Industree Crafts ..... www.industree.org.in

E + Co ..... www.eandco.net